

# Report survey post-doctoral researchers at NTNU

**DION board 2015-2016** 

Final version

31 mai 2016, Trondheim

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## 1. Summary

A survey has been completed by DION in April-May 2016 that was directed towards post-doctoral researchers at NTNU. The goals of the survey were to 1) find out needs of this group of temporary employees at NTNU and how DION can offer support, 2) gather an overview of post-doctoral researchers at NTNU and their work and life situation, and 3) raise the visibility of DION towards this specific group. Around 400 researchers received our survey by email, and 140 valid responses were gathered.

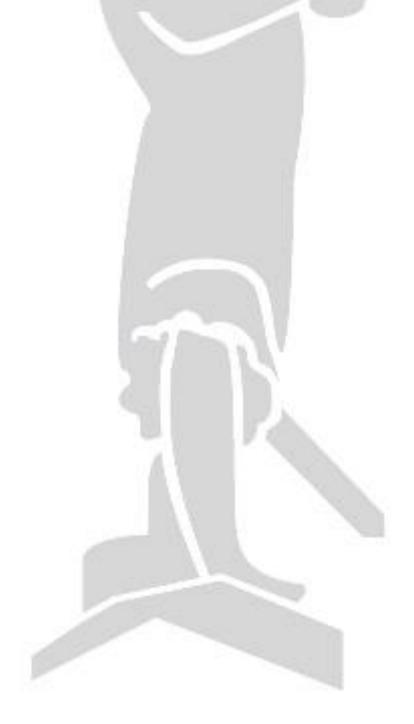
The results of the survey are presented in this report. The responses indicate a strong need for more information on future career opportunities, practical information related to NTNU employment and salary, and opportunities for collaboration within and outside NTNU. The results also indicate an interest in DION activities such as the provision of information, receiving individualised support by DION board members, social and research events and activities that focus on future career opportunities and sharing experiences. Next to that, the responses offer insights in the work and life situation of the respondents reflecting the group of post-doctoral researchers at NTNU. 79 respondents showed interest in receiving DIONs' newsletter, which supports the strengthening of the visibility of DION.

The discussion and conclusion of this report present suggestions for further involving post-doctoral researchers in the work and activities of DION in the future.



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## 2. Introduction: goals of survey

Since 2015 DION (The Interest Organization for PhD Candidates and Postdoctoral researchers at NTNU) also officially represents post-doctoral researchers at NTNU. One board member, dr. Elli Verhulst, joined the DION board 2015-2016 as the first representative of this group of temporary employees. This new focus is however not well-spread yet amongst the broader target group. Up to now, DION mostly reaches – and reaches out to – PhD students. This can be noticed in the activities organised by DION, in which very few post-doctoral researchers take part. The survey originated from the wish from DION to get a better overview of how the organisation can support post-doctoral researchers at NTNU better in the future.

The survey has the following goals:

- Find out needs of this group of temporary employees at NTNU and how DION can offer support,
- Gather an overview of post-doctoral researchers at NTNU and their work and life situation,
- To raise the visibility of DION towards this specific group.

## 3. Methodology

The survey has been developed with the three main goals in mind and has been partially based on other PhD surveys performed and gathered by previous DION boards, such as *DION's PhD-survey 2012* and *Tekna's Stipendiatundersøkelsen 2009*.

A proposal of the survey has been prepared by the project lead and reviewed and tested by other DION board members. The testing aimed at verifying the functionality of the survey and checking the time needed to complete it. The survey was made in Google Forms. The complete survey can be found as Attachment 2 of this report.

An invitation e-mail with a link to the survey was sent to around 400 post-doctoral researchers at NTNU on 25th April 2016. A deadline for completing the questionnaire was set for 4th May 2016. This timing made it possible to gather and analyse the results before DION's Annual General Meeting (AGM) on May 10<sup>th</sup> 2016 and to present these results to the newly elected DION board 2016/2017. Next to that, sending out the survey before the AGM also raises the visibility of DION and might attract interested post-doctoral researchers to become candidates to join the new board.



#### 4. Results and discussion

140 respondents provided valid responses on the survey. Most replies were received on the day the survey was communicated to the post-doctoral researchers at NTNU: 105 replies on 25/04. Extra responses were received in the following days and after a reminder e-mail.

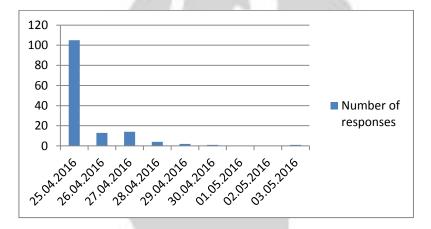


Figure 1: Number of responses in time

The responses have been exported and saved into a spreadsheet (Excel) and are available for the upcoming boards in DION's archives. A PDF version of the responses is added as Attachment 3. This report presents the results of the survey, based on all responses. The results are discussed in three parts, in correspondence with the three main goals of the survey:

- how can DION support post-doctoral researchers in the future,
- overview of post-doctoral researchers at NTNU and their work and life situation,
- and raising visibility of DION towards post-doctoral researchers at NTNU.

#### 4.1. Part one: how can DION support post-doctoral researchers in the future

#### 4.1.1. Visibility of DION

Communication channels that get used most frequently by the current DION board are its website, Facebook page, Innsida, DION's monthly happy hour and other social activities. However, these are not the channels that reach most post-doctoral researchers. The biggest group, almost 30%, heard about DION through others at NTNU. Other introductory channels that account for almost 10% of the responses each are DION activities, NTNU's website and DION's newsletter. DION's monthly happy hour — one of DION's recurrent social activities - only reaches 0,7% of respondents as a way to get to know the organisation. Other channels mentioned are: e-mail and mailing-list, through the orientation programme for newcomers, posters on DION events, at a PhD course, and from friends. About 20% of the respondents indicate they have never heard of DION before.



#### How did you first hear about DION?

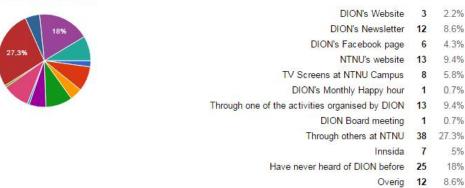


Figure 2: Responses on how post-doctoral researchers heard first about DION

The results indicate that it might be useful to reconsider the current channels and their aims in order to reach a higher visibility within DION's target group and to use different channels for specific goals.

#### 4.1.2. Information topics

#### Which topic(s) would you like more information about? (Multiple answers possible)

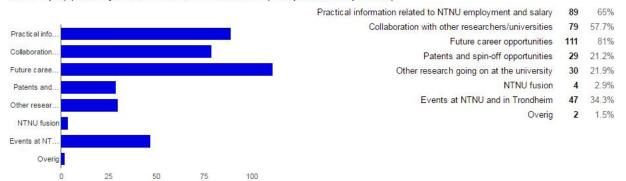


Figure 3: Responses on topics on which more information is wanted

The answers on this question indicate a strong need for information on future career opportunities, practical information related to NTNU employment and salary, and information on collaboration with other researchers and universities. Also more information on events at NTNU and in Trondheim, other research going on at the university and patents and spin-off opportunities are indicated to be welcome, though in a lower degree. More information on the NTNU fusion does not seem to be needed. Other topics mentioned are health problems related to and resulting from PhD, and funds and incentives.

Currently, DION provides much practical information for PhDs related to NTNU employment and salary on their website and in a FAQ (Frequently Asked Questions) section. The FAQs get updated regularly, based on incoming questions from and cases related to PhD students. Next to that, NTNU provides information to the PhD students in a PhD Handbook and on a designated website for PhDs.

The results indicate that such information is also wanted by post-doctoral researchers. DION could thereby provide a parallel track on their website and in its communication and activities that focus on post-doctoral researchers. Next to that, DION can share the insights on this need for more support of post-doctoral researchers to NTNU and its communication department and discuss how to make this happen.



#### 4.1.3. DION activities and forums

#### Which DION activities/forums have you participated in/used in the past? (Multiple answers possible)

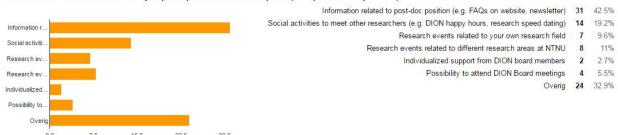


Figure 4: Responses on activities/forums used in the past

41% of respondents indicated to have looked for information through DION related to their position. More than 30% however has not participated in any DION activity (which is represented within the answers 'others'). Almost 20% of the respondents have attended one or more social activities organised by DION. Only a low number of post-doctoral researchers received individualized support from DION, or used the possibility to join a board meeting.



Figure 5: Responses on activities/forums wanted more in the future

On the question what the respondents would like to see more of in the future, a high number of replies is directed towards the provision of information related to the post-doc position, social activities and research events related to their own research field. More research events related to different research areas at NTNU were also indicated by more than 30% of respondents.

The answers on the latter question indicate a gap between the use of individualized support from DION board members and the wish or need to use this forum.



#### Please share your suggestions for activities you would like DION to organise.

Per semester a "FAQ" meeting, explaining Norwegian culture/higher education system, funding, who is who at NTNU etc.
Help finding accommodation
More information about post-doc position

#### Experience sharing

A loose poster-presentation event where you can see current topics of NTNU research, and can engage in a loose atmosphere with other researchers. This should be structured to see differences between departments

Seminars with focus on life after PhD/Post Doc

Collaboration with other organisations such as TEKNA (I am organised in TEKNA)

Afterwork brus/beer or similar. In a bar or we can rent a place (such as the monthly DION happy hour)
Walking tours

Group building events/trips with people from VERY different fields.

Bowling, Concert, Sports, food fair

Table 1: Suggestions for activities

The survey asked for suggestions for activities that DION can organise. These suggestions can be clustered into different themes, including: provision of information and individual support, research event with focus on sharing experiences, seminars on future careers, collaboration with other organisations, and social events.

Post-docs want DION to focus on providing more information on post-doctoral positions, and on promoting the possibility to ask for individualized support from DION board members. Next to that, the results indicate an interest in social and research events. DION can thereby focus on involving this group more in the social events that they already organise. Suggestions for activities indicate that there is also an interest in events that focus on sharing experiences and future careers.

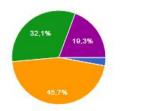
Next to that, it might be interesting to organise research events related to specific research fields and support the creation of research forums within NTNU or in collaboration with other universities. Recently a question for collaboration has come from the research area Sustainability NTNU, which is currently setting up a Young Researcher forum. A partnership between DION and such subject-oriented groups could be beneficial for both parties. DION has discussed working with such groups to formally become DION subchapters for specific faculties or institutes, but this is not currently in practice.



# 4.2. Part two: overview of post-doctoral researchers at NTNU and your work-life situation

#### 4.2.1. Work situation

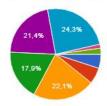
What is the length of your post-doctoral position



< 1 year	4	2.9%
1 year	0	0%
2 years	64	45.7%
3 years	45	32.1%
> 3 years	27	19.3%

Figure 6: Length of post-doctoral position

#### At which faculty are you employed?



Humanities (HF)	7	5%
Social Sciences and Technology (IVT)	8	5.7%
Engineering Science and Technology (IVT)	31	22.1%
Information Technology, Mathematics and Electrical Engineering (IME)	25	17.9%
Natural Sciences and Technology (NT)	30	21.4%
Medicine (DMF)	34	24.3%
Architecture and Fine Art (AB)	2	1.4%
Other (e.g. faculties at HiST, Gjøvik and Ålesund, SINTEF)	3	2.1%

Figure 7: Faculty of employment

#### Do you collaborate with other PhD and post-doctoral researchers at NTNU?

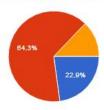




Figure 8: Collaboration with other researchers

The results indicate that almost all post-doctoral researchers have a position for 2 or more years. Employment of this type of temporary employees happens mostly at DMF, IVT, NT and IME, and in a much lower degree at the other faculties within NTNU. Almost 80% of post-doctoral researchers cooperate with researchers from own or other scientific disciplines within NTNU.

#### 4.2.2. Internationalisation

Do you currently participate in international research project(s)?

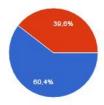




Figure 9: Participation in international research project

#### Which reasons are important to you for going abroad as part of your post-doctoral fellowship? (Multiple answers possible)

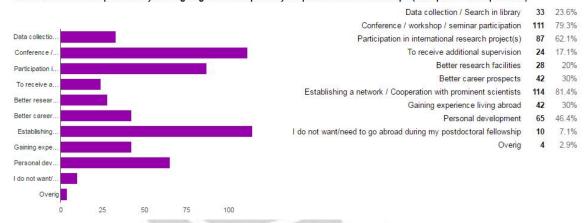
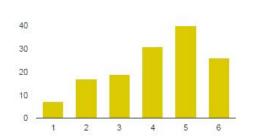


Figure 10: Important reasons for going abroad

60% of post-doctoral researchers collaborate in international projects. A second question related to internationalisation focused on reasons that are considered important for the respondents to go abroad. The results indicate the establishment of a network/cooperation with prominent scientists, conference/workshop/seminar participation and participation in international research projects as the most important reasons for going abroad. Almost half of the respondents also indicated personal development as an important reason and 30% better career prospects. Less than 10% indicated not to want/need to go abroad during their fellowship.

#### 4.2.3. Post-doc experience

#### Do you feel included in the academic life of your department?



No, not at all:	1	7	5%
	2	17	12.1%
	3	19	13.6%
	4	31	22.1%
	5	40	28.6%
s, to a very large extent:	6	26	18.6%

Figure 11: Inclusion in academic life at department

Ye

### Do you feel socially included at your department?



No, not at all:	1	9	6.4%
	2	12	8.6%
	3	19	13.6%
	4	27	19.3%
	5	36	25.7%
Yes, to a very large extent:	6	37	26.4%

Figure 12: Inclusion in social life at department



#### How would you describe your post-doc experience at NTNU so far, related to employment, research, funding, or other aspects?

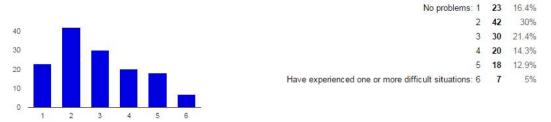


Figure 13: post-doc experience

The results of the survey indicate quite a high level of satisfaction of post-doctoral researchers concerning the way they feel integrated within their department, both academically as socially. When asked about their post-doc experience so far, the majority indicates to have had no or few problems so far. However, a significant number of the respondent indicated to have met one or more difficult situations. In order to be able to go deeper into this, more detailed questions are needed.

#### 4.2.4. Future career

#### Which sectors would you consider to work in after the post-doc? (Multiple answers possible)

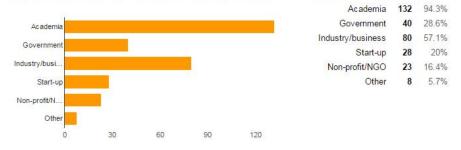


Figure 14: Considered sectors for future work

#### Would you like to continue working at NTNU after your post-doc if offered an appropriate position?



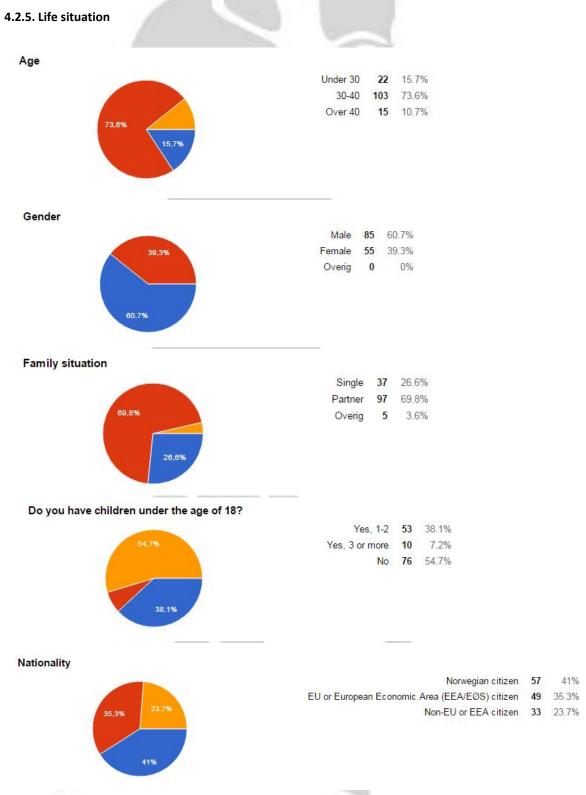
Figure 15: Responses on the wish to work at NTNU in the future

The results related to future career opportunities clearly indicate a strong wish of post-doctoral researchers to continue working in academia. Specifically, almost 80% of the respondents would like to continue working at NTNU after finishing their fellowship, and 18% would consider it.

More than half of the respondents also consider working in industry, followed by other sectors, such as government, start-ups and non-profit/NGO.



These results are in line with the interests that were indicated on information regarding future career opportunities, an issue that might need to be taken up by the rector of research at NTNU.



Figures 16-20: Age, gender, family situation, children under 18 and nationality



The results related to the personal situation of post-doctoral researchers at NTNU give a good overview of the age group (largest group between 30-40 years old), gender balance (60 male – 40 female), the family situation (70% have a partner, almost 50% have kids) and the nationalities (almost 60% non-Norwegians). These insights can be valuable in the preparation of activities and events by DION directed to this target group.

#### 4.3. Part three: raising visibility of DION towards post-doctoral researchers at NTNU



Figures 21: Responses related to participation in lottery and interest in newsletter

#### 4.3.1. Lottery

A total of 105 respondents wanted to join the lottery. Adding a lottery for a small prize seems to be a good way to motivate the target group to answer a survey, in combination with a short survey (about 5 min). These respondents were put in a spread sheet with the row number linked to each respondent. An online 'random number picker' - Random.org – was used to select a winner.

Winner of lottery: dr. Filippo Sanfilippo!

The winner was announced at the Annual General Meeting (AGM) on 10th May 2016 and in an email to all the participants of the lottery following the meeting.

#### 4.3.2. DION Newsletter

A total of 79 respondents indicated they want to subscribe for the DION newsletter. The email addresses are added to the DION-newsletter mailing list.

The survey in itself has raised visibility of DION with the post-doctoral researchers at NTNU and has indicated an interest from this group to learn more about the organisation and how they can get involved.



## 5. Conclusions

DION performed a survey in April-May 2016 targeting post-doctoral researchers at NTNU. The survey originated from the wish to get a better overview of how DION can support this group of researchers at NTNU better in the future, beyond its historically primary audience of PhDs. A large response was received, with 140 valid replies on questions related to how DION can support post-doctoral researchers (part one) and on the work-life situation of the targeted group (part two). This section discusses how these results can be taken further by the DION board 2016/2017.

#	Issue coming forward from survey results	Proposal for future DION board(s)	Who
1	Information provided towards post-docs	Create a post-doc section of the DION website to provide practical information related to future career opportunities, FAQs, NTNU employment and salary, and opportunities for collaboration, etc., specifically for and directed towards post-doctoral researchers.	DION
		Share the need of post-doctoral researchers for more information on the topics mentioned above towards NTNU communication department, cfr. PhD pages on NTNU website.	NTNU communication dept.
2	DION Activities	Organisation of activities directed towards providing practical information, promoting individualized support, social and research events, sharing experiences and future careers.	DION
		Organisation of research events related to specific research fields, e.g. sustainability, and/or collaboration with other research organisations within and outside NTNU.	DION and partner organisations such as FYSS, NIRS (REFLEX)
3	Internationalisation	Share results related to internationalisation, indicating that a lot of international collaboration and exchanges take place within the post-doctoral researchers' group.	NTNU International office
4	Post-doc experience	Evaluate if more insights on the level of inclusion in the academic and social life are wanted and, if so, how this can be studied.	DION
5	Future career	Share results related to future career opportunities to NTNU rector of research and NIRS (REFLEX), together with the responses on the need for more information related to future career opportunities.	NTNU rector of research, NIRS (REFLEX)

This report presents the results of the DION survey to post-doctoral researchers at NTNU. The report will be presented to the DION board 2016/2017 and will be made available on the DION website.



#### 6. Attachments

Attachment 1: E-mail to post-doctoral researchers

Attachment 2: Survey (internal document

Attachment 3: Spread sheet results (internal document)

#### Attachment 1: E-mail to post-doctoral researchers

Subject: Fill out DION's survey for post-doctoral researchers

Dear post-doctoral fellow,

We from DION (The Interest Organization for PhD Candidates and Post-doctoral researchers at NTNU) would like to get a better overview of how we can support postdoctoral researchers at NTNU.

In order to find this out, we developed a survey, which you can find <u>here</u>. Answering the survey takes about **5 mins** and would help us a lot.

As a way to thank you, we are organizing a lottery for all post-docs who respond by 4<sup>th</sup> Mai 2016. You can win 2 tickets for the movie theatre in Trondheim!

Highlights of the survey results will be presented at DION's Annual General Meeting which takes place on 10<sup>th</sup> May at Samfundet. (link: <a href="https://www.facebook.com/events/1142681839097613/">https://www.facebook.com/events/1142681839097613/</a>)

In addition to the election of the 2016-2017 DION board, presentations will be given by PhDs and post-doctoral researchers on international research experiences.

We will announce the winner of the lottery at the Annual General Meeting.

More information can be found on DION's Facebook-page: <a href="https://www.facebook.com/DION.NTNU/">https://www.facebook.com/DION.NTNU/</a>
Many thanks for filling out the survey, and we hope to see you at the next DION event!

With kind regards, Elli Verhulst Board member of DION



http://org.ntnu.no/dion/ https://www.facebook.com/DION.NTNU/

