Early Career Researcher – Development Programs at MN

Finn-Eirik Johansen
Vice Dean for Research
The Faculty shall be a national leader in education and training for researchers. The most important aspect is that the research involved shall be of high quality, but priority shall also be placed on boosting transferrable skills and providing guidance for careers in different sectors.

Knowledge development in a changing world: Science and technology towards 2030 - Strategy
# Science and technology at UiO

## Faculty of Mathematics and Natural Sciences

### Profile areas
- Digitalization and computational science
- Life science
- Earth and space sciences
- Energy and materials science

### Departments
- Biosciences
- School of Pharmacy
- Geosciences
- Mathematics
- Chemistry
- Physics
- Informatics
- Theoretical Astrophysics
- Technology Systems
- Centre for Science Education

### Other relevant units
- The Science Library
- Natural History Museum
- Norwegian Centre for Molecular Medicine
A few facts about the faculty

- 6000 Students
- 50/50 Science & technology
- 800 PhD-students
- 2000 Employees
- 1,9 mrkd. NOK revenue
- 40% External funding
- More than 400 Partners from private and public sector
- International partners

- The Panorama strategy
- The Guild network
- Health Information System Program
- Activities on all continents
The key to leading lies in research
Meet the challenges of the future through research at a high international level

- Support research environments with potential to reach the international top level
  - Focus on training and career development for younger researchers
- Strengthen important research infrastructures and be a driving force in utilizing research data
Culture for learning

Our candidates shall be successful both academically and professionally
Knowledge in use

Our academic communities shall be the leading partners for the business sector and entities in the public sector
Focusing on people

The Faculty shall be an attractive and inclusive place of work and study

- Work and learning environment
- Comprehensive professional development
- Organization, management and management
- Gender balance and diversity in recruitment
Elements in researcher training and education

- PhD candidates
  - research
  - courses
  - career development

- Postdocs and researchers
  - research
  - career development

- Supervisors
  - research leader program (UiO)
  - supervisor seminars (MN)
Uncertainty is the main challenge for ECR research project, social life, and future career.
Discussion Material for Newly Accepted PhD candidates and their Supervisors

Instructions

1. Write the answer that fits best with WHAT/WHY/WHERE/WHERE/WHEN/WHY/WHERE/WHERE

General

The PhD is mainly about: 1. 2. 3. 4. 5.

Employment

The aim of a PhD is: 1. 2. 3. 4. 5. To become a research scientist.

State some other important parts with PhD education:

Postdoctoral fellowship

Date:

Vice President

Academic supervisor

Date:

University of Oslo

Faculty of mathematics and natural sciences

Mandatory professional development plan for postdoctoral research fellows


Current position:

Academic supervisor.

Description (position, teaching, etc.):

Encounter between research fellows.

Form of evaluation to the institution.

The postdoctoral fellow's academic supervisor is jointly responsible for filling out and submitting the development plan to the department head of administration no later than 1 month after commencing the postdoctoral period. The plan shall be submitted together with the contract of employment. Grants and stipends will be paid by the Research Council, which must also inform the plan to Riksforskningsrådet.

1. Main objectives for the postdoctoral period:

2. Specific objectives and short- and long-term objectives.

3. Measures to monitor the individual's main areas of consideration for appointments to

4. First or second academic position (associate professor),

5. The key characteristic is listed in the Guideline for appointment to associate professor.

6. General activity and time table results relating to research, teaching and other activities, as well as public relations and innovation activities when these are of relevance.

7. Include plans for academic work (publications) when relevant.

8. When no internationalisation in the form of research and publication remain.

9. Plans for career development activities (e.g. the REU fellowship postdoctoral development program).
PhD Education

Premises

- PhD is researcher education and training
- PhD candidates are an important and flexible work force for faculty members
- Most PhD candidates do not end up in academia
- Generic, scientific competences are increasingly in demand with employers

Composition of the PhD

- Mandatory work (1 year)
- Research work (2.5 years)
- Courses (0.5 year)
Career development
Structure of ECR development programmes

- Postdoctoral Career Development Programme
  - Course with e-modules and peer group meetings
- PhD Career Development Programme
  - Course with e-modules and live Q&A
- Early Career Researcher Development Programme
  - Stand-alone seminars and workshops
# Organization of MN pilots 2018

## PDP-1 (a.k.a. PD-CDP)

|----------------------|-------------------------------|-----------------------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|

## PDP-2 (a.k.a. ECR-DP)

<table>
<thead>
<tr>
<th>1 d WS</th>
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<tbody>
<tr>
<td>Career Perspectives (Yellow Research)</td>
<td>Career planning (PostdocTraining)</td>
<td>Developing as a researcher (PostdocTraining)</td>
<td>How to attract funding (MN Faculty)</td>
<td>Career options (MN Faculty)</td>
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</tbody>
</table>
**PD-CDP pilot 2018**

**Postdoctoral career development programme**

|----------------------------------|--------------------------------|----------------------------------|---------------------------|---------------------------|--------------------------|

- 15 eClasses
- Average two hour work load per eClass
- Seven months duration
- New module released every fortnight
- 20 participants
- Peer group meetings (org. by Faculty)
- Three mentor sessions with trainer
- Introduction seminar at Sundvolden
PD-CDP evaluation

How would you describe the programme?
PD-CDP evaluation

Intro seminar

How would you describe the seminar?

Would you recommend a continuation of the seminar?

Yes / mandatory: 10 votes
Yes / 0.5/1 d in Oslo: 3 votes
Yes / not mandatory: 2 votes
No: 0 votes

n = 15
On average, would spending two working hours on each module be sufficient to provide you with the desired output of the programme?

Approximately how much time did you spend actively working with the LEAST/MOST work intensive eClass?

Yes
No

Votes

> 2h
1 - 2h
< 1h

Votes

> 4h
3 - 4h
2 - 3h
1 - 2h

Votes

n = 15
PD-CDP evaluation

Which of the 15 modules would you rank as the three LEAST and three MOST beneficial to you?

![Bar chart showing the rankings of the 15 modules.]

1. How to create a solid platform
2. Your skills and preferences
3. Your motivations and priorities
4. Your career destinations
5. Creating your career plan
6. How to reach your goals
7. How to create more time
8. How to be a prolific writer
9. Authorship negotiation
10. Publication strategy
11. How to win funding
12. How to manage projects
13. Communication challenges
14. Networking
15. Explore your career options

n = 15
**PD-CDP evaluation**

**Peer group meetings**

What frequency of the peer group meeting would you prefer?

- **A peer group session after**
  - each eClass: 2 votes
  - every 2nd eClass: 10 votes
  - every 3rd eClass: 1 vote

**Mentor sessions**

How many mentoring sessions did you do?

- 3h: 2 votes
- 2h: 1 vote
- 1h: 4 votes
- 0h: 10 votes

n = 15
PD-CDP evaluation

The PDDP overall

On a scale of 1-10, how satisfied are you with the programme overall?

15 feedback sheets (20 attendees) ave. score. 8.1

Did the programme meet your expectations?

“The programme did in general meet, and at some points exceeded, my expectations. This kind of programmes can be a lot of talk for nothing, but there was a lot of focused information in the eClasses. The programme touched upon very relevant topics that are important to reflect around and subjects I didn’t think of before. It was a real eye-opener on how to be more competitive and do strategic career choices. However, parts of the programme is too internationalised and need to be better related to Norwegian models.”

n = 15
PD-CDP evaluation

Continuation

On a scale of 1-10, how likely would you be to recommend the programme to a friend or colleague?

What level of early career researchers do you think would benefit from this programme?

15 feedback sheets (20 attendees) ave. score. 8.9

n = 15
**PD-CDP 2019**

- < 60 participants
- Postdocs and researchers
- Start-up spring: announced on web site and mailing list
- In dialogue with PostDocTraining to adapt the programme better to the Norwegian system and local context
PhD career development programme pilot 2019

1. Motivated research skills
2. Career anchors
3. Develop your career destinations
4. Create your career plan

Live Q&A
Live Q&A
Live Transferrable skills audit

• < 50 participants, PhD students
• Start-up will be announced on the website and mailing list
ECR-DP pilot 2018

- Five stand-alone workshops or seminars
  - Three held by consultants
  - Two held by MN.
    - These were also open to Ph.D. students
**ECR-DP**

### ‘Career perspectives - strengthening your CV for an academic career’

Yellow Research (09:00 - 15:30)

<table>
<thead>
<tr>
<th>Session</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Session 1</td>
<td>Main research funding schemes and agencies</td>
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<tr>
<td>Session 2</td>
<td>Benchmark for academic career</td>
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<tr>
<td>Session 3</td>
<td>Being a scientific leader</td>
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<tr>
<td>Session 4</td>
<td>A competitive CV</td>
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<tr>
<td>Session 5</td>
<td>Strategy for pursuing an academic career</td>
</tr>
</tbody>
</table>
How likely are you to recommend this workshop to a friend or colleague?

22 feedback sheets (26 attendees) ave. score. 8.6
### ECR-DP

#### Session Overview

<table>
<thead>
<tr>
<th>Session</th>
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</thead>
<tbody>
<tr>
<td>Session 1</td>
<td>Know your strengths, know your options</td>
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<tr>
<td>Session 2</td>
<td>Create your career plan</td>
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<tr>
<td>Session 3</td>
<td>Build your networks, develop your profile</td>
</tr>
<tr>
<td>Session 4</td>
<td>Develop and sell the skills that win you jobs</td>
</tr>
</tbody>
</table>

How likely are you to recommend this workshop to a friend or colleague?

‘Take Charge of Your Career as an Early Career Researcher’

*PostdocTraining (09:00 - 16:30)*
How likely are you to recommend this workshop to a friend or colleague?

27 feedback sheets (30 attendees) ave. score. 9.0

"This is necessary knowledge to introduce in academia, especially in early years. It helps increase self-confidence and lose some fears."
How likely are you to recommend this workshop to a friend or colleague?

‘Developing as a Researcher: Productivity and Leadership’

PostdocTraining (09:00 - 16:00)

Session 1 - How to manage time for higher productivity
Session 2 - The leadership challenge
Session 3 - Communicating as a leader
Session 4 - Building a team, whether you are the boss or not

“This is necessary knowledge to introduce in academia, especially in early years. It helps increase self-confidence and loose some fears.”
ECR-DP

How likely are you to recommend this workshop to a friend or colleague?

37 feedback sheets (41 attendees) ave. score. 8.5
How likely are you to recommend this workshop to a friend or colleague?

‘How to attract funding’

MN Faculty (09:00 - 15:00)

Session 1 - Your Guide to Funding Opportunities
Session 2 - The Signature of a Competitive CV
Session 3 - Anatomy of the Grant Proposal
Session 4 - The Proposal Evaluation Process, An Evaluator’s Story
Session 5 - Managing the Application Process
Session 6 - Been there, done that! Experiences from applicants.
How likely are you to recommend this workshop to a friend or colleague?

29 feedback sheets (56 attendees) ave. score. 8.9

“The seminar gave a realistic view on the career options inside academia, and a very broad overview of options elsewhere.”
How likely are you to recommend this workshop to a friend or colleague?

‘Career options’

MN Faculty (09:00 - 12:00)

Session 1 - Take Charge of Your Career
Clarification of expectations, The Value of Networking, CV: academic vs. non-academic

Session 2 - Work-life Balance
Session 3 - Academic Career Paths
Session 4 - Non-academic Career Paths
Mingling and snacks
# Participation ECR-DP

<table>
<thead>
<tr>
<th></th>
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<th>Take Charge of Your Career</th>
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<th>Career Options</th>
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<td>Informatics</td>
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<tr>
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<td><strong>Total</strong></td>
<td><strong>25</strong></td>
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<td><strong>22</strong></td>
<td><strong>41</strong></td>
<td><strong>54</strong></td>
<td><strong>160</strong></td>
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</tbody>
</table>
Employment category of participants

How to Attract Funding (41 participants)
- PhD: 20%
- Postdoc: 56%
- Researcher: 24%

Career Options (54 participants)
- PhD: 46%
- Postdoc: 41%
- Researcher: 13%
<table>
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<th>PhD</th>
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<td>Productivity (PostdocTraining)</td>
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<tr>
<td>1 d seminar</td>
<td>PhD day! 2-day seminar for first year candidates</td>
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</tbody>
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Questions?

www.mn.uio.no/cdp
www.mn.uio.no/phd
www.mn.uio.no/postdoc