The faculty and SOMA welcome all master students to a seminar Monday 15.11.10 at 16.00 – 18.00

How to get a PhD?
Programme

1. Introduction / Welcome
2. The PhD programmes - Vice Dean Helge Klungland
   • The components of a PhD programme
   • How & when to apply, criteria for admission
   • How & when to find a research project and supervisors
   • Financing of studies - PhD research fellowship
3. Presentations from PhD students, personal experiences
4. Open session – questions / dialogue
The objective

Three years of full-time study (180 credits)

• The PhD education programme has the objective of training candidates to be independent researchers who can work at an international level in cooperation with Norwegian and international research groups.

• The PhD education programme has the objective of meeting the current and future requirements for research, development, supervision and dissemination within universities, other public institutions, private-sector institutions, enterprises and organizations

(NTNU PhD regulations, § 2)
The components

The PhD education programme includes:

- completion of an independent piece of research (PhD project) in active cooperation with other researchers
- writing a PhD thesis based on the PhD project
- approved organized academic training
- participation in active research groups in Norway and internationally
- scientific and academic dissemination, including the publication of the PhD project work

*(NTNU PhD regulations, § 4)*
Organized academic training

- PhD courses, at least 30 ECTS points

- Mandatory: SMED8004, Introduction to research, SMED8005 Communication of Science.
- Other courses: NTNU PhD courses, other national or international courses.
- Optional courses: Theoretically and methodically courses, adapted to the research project
The PhD project

- A research project, exclusive and well defined
- The project may be a part of a research groups collective work
- The PhD student should always have at least two supervisors
- The project must be large enough, **and small enough**
- A research protocol at the start, description of the research area (introduction), the hypothesis, project materials and methods, ethical considerations, time plan, publication plan, references
PhD programmes

• Nearly 50 different programs at NTNU
• 6 programs at The faculty of Medicine:
  – PhD in Clinical Medicine
  – PhD in Molecular Medicine
  – PhD in Neuroscience
  – PhD in Medical Technology
  – PhD in Public Health
  – International PhD in Palliative Care
Learning outcomes

• Knowledge:
  – Knowledge at the most advanced frontier of a field of work or study and at the interface between fields

• Skills:
  – the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice

• Competence:
  – demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

(European Qualifications Framework, EU/Bologna)
Admission criteria

• A (relevant) master’s degree or equivalent education
• A weighed average grade in the past two years (equivalent to 120 credits) of master’s or equivalent education with a grade of B or higher, in accordance with NTNU’s grading system.
• Project plan
• Funding plan (PhD fellowship)
• Supervisors (at NTNU)
Funding

- Normally a 3 years PhD fellowship, implying:
  - Employment as a staff member at the faculty in the fellowship period
  - Employment at NTNU also when external financing sources
  - The salary: The grades in the State salary scale are 48 without publications, or 50 with two publications in advance
  - NOK 383 900 / NOK 397 200 before income tax
  - Additional: Project funds
Find a project and find supervisors

• Two different ways to a PhD position:

  – The PhD fellowship are advertised with a defined topic – you can apply without a supervisor or project plan (which is already there). In this case the supervisor / researcher are looking for a PhD candidate

  – The PhD fellowship are advertised more openly, and it is specified that the application shall include a project plan and supervisors. In this case you must find supervisors and define a research topic in advance (if not a potential supervisor ask you)
Funding sources I

• **NTNU** – open announcements on defines projects, mainly during spring/winter (SO-midler)
  
  – Projects selected at Department level
    • Successful projects are announced
  
  – Specific areas (HUNT, SFF, Medical technology, FUGE)
    • Description of project
    • Supervisor & research group
    • Candidate

• **NTNU** – positions advertised from the research groups financed through a (often) large project (project is normally defined – see also next page)
Funding sources II

• **Samarbeidsorganet**; Liaison Committee between the Central Norway Regional Health Authority (RHA; Helse Midt-Norge RHF) and the Norwegian University of Science and Technology (NTNU) – open announcements, normally announced in May/June, with deadline for applications in mid September.

• 25 positions offered for 2011

• Selections are based upon
  – Project description
  – Quality of supervisor & research group
  – Candidate

• Deadline
Funding sources III

- **Norwegian Research Council (or EU)** PhD project is based on project funding (often large projects), fellowships offered by the research groups – The research groups define the topics which is in accordance with the original application

- **Norwegian cancer society** (Kreftforeningen)

- **Health and rehabilitation** (Helse og rehabilitering; Extra-spillet)
  - Application through an voluntary organization
Funding sources:

- **PhD Research scholarship within Timber Structures - IVT 92/10**
  - The positions are administrated by the Department of Structural Engineering under the Faculty of Engineering Science.

- **Researcher and Program Coordinator at the Industrial Ecology Programme (IVT-91/10)**
  - The Industrial Ecology programme (IndEcol) at the Norwegian University of Science and Technology is an...

- **POSTDOKTOR STILLING INNEN MEDISINSK TEKNOLOGI VED INSTITUTT FOR FYSIKK**
  - Innen NTNU's tematiske satsingsområde Medisinsk teknologi er det ledig en to-årig post-doktor stilling innen...

- **Fast stilling som førstekonsulent - DMF 81-10**
  - Ved Institut for sirkulasjon og bildediagnostikk (ISB), Det medisinske fakultet er det ledig en 100 % fast stilling...

- **PhD position within f "Thermodynamics and Energy"**

- **Ledige stillinger**
  - Stipendiastilling ved Institutt for Bioteknologi
  - Ved Institutt for bioteknologi, Fakultet for naturvitenskap og teknologi, NTNU, er det ledig stilling som...

- **(9.11.2010)**
  - PhD Research scholarship within Timber Structures - IVT 92/10
  - The positions are administrated by the Department of Structural Engineering under the Faculty of Engineering Science...

- **(9.11.2010)**
  - Researcher and Program Coordinator at the Industrial Ecology Programme (IVT-91/10)
  - The Industrial Ecology programme (IndEcol) at the Norwegian University of Science and Technology is an...

- **(8.11.2010)**
  - POSTDOKTOR STILLING INNEN MEDISINSK TEKNOLOGI VED INSTITUTT FOR FYSIKK
  - Innen NTNU's tematiske satsingsområde Medisinsk teknologi er det ledig en to-årig post-doktor stilling innen...

- **(8.11.2010)**
  - Fast stilling som førstekonsulent - DMF 81-10
  - Ved Institut for sirkulasjon og bildediagnostikk (ISB), Det medisinske fakultet er det ledig en 100 % fast stilling...

- **(5.11.2010)**
  - PhD position within f "Thermodynamics and Energy"
Who should know?

- Your potential supervisors
- Head of Department
- Regional committee for ethics in medical research (REK midt)
Project and supervisors

• Build on the master topic or choose another research group / thematic area?

• Paper from master thesis???

• Use the faculty web sites to learn more about our research groups and your contact persons. Examples:
  – http://www.ntnu.edu/isb/research
  – http://www.ntnu.edu/inm/research
When to apply?

• Possible to apply during the final year on the master programme.

• If you get the fellowship, it will be with the requirement that you graduate before you can start in the PhD position (or a defined date as is the case for Samarbeidsorganet).

• Apply in Autumn, graduate in June, start i.e in July
How to succeed?

• Work hard!

• Be good!