



# NTNU

Det skapende universitet

## Life as a PhD student

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@mariabline



# About me

- 1997 – 2002: NTNU  
Siv.ing. (MSc)
- 2000 – 2001: UCSB  
4<sup>th</sup> year of MSc
- 2002 – : SINTEF  
Research scientist in  
information security
- 2011 – 2015: NTNU, ITEM  
PhD student: Smart Grids as  
a critical infrastructure



- Family
- Handball, running, skiing
- Many friends, some social life 😊



## My expectations when I started

- Time to do real research
  - Learn research methods, use them properly
  - Become specialist in one topic – MY topic
- The challenge of saying "no"

Project plan

Deliverables

Deadlines

Evaluations

Budget

Actual work

Time schedule

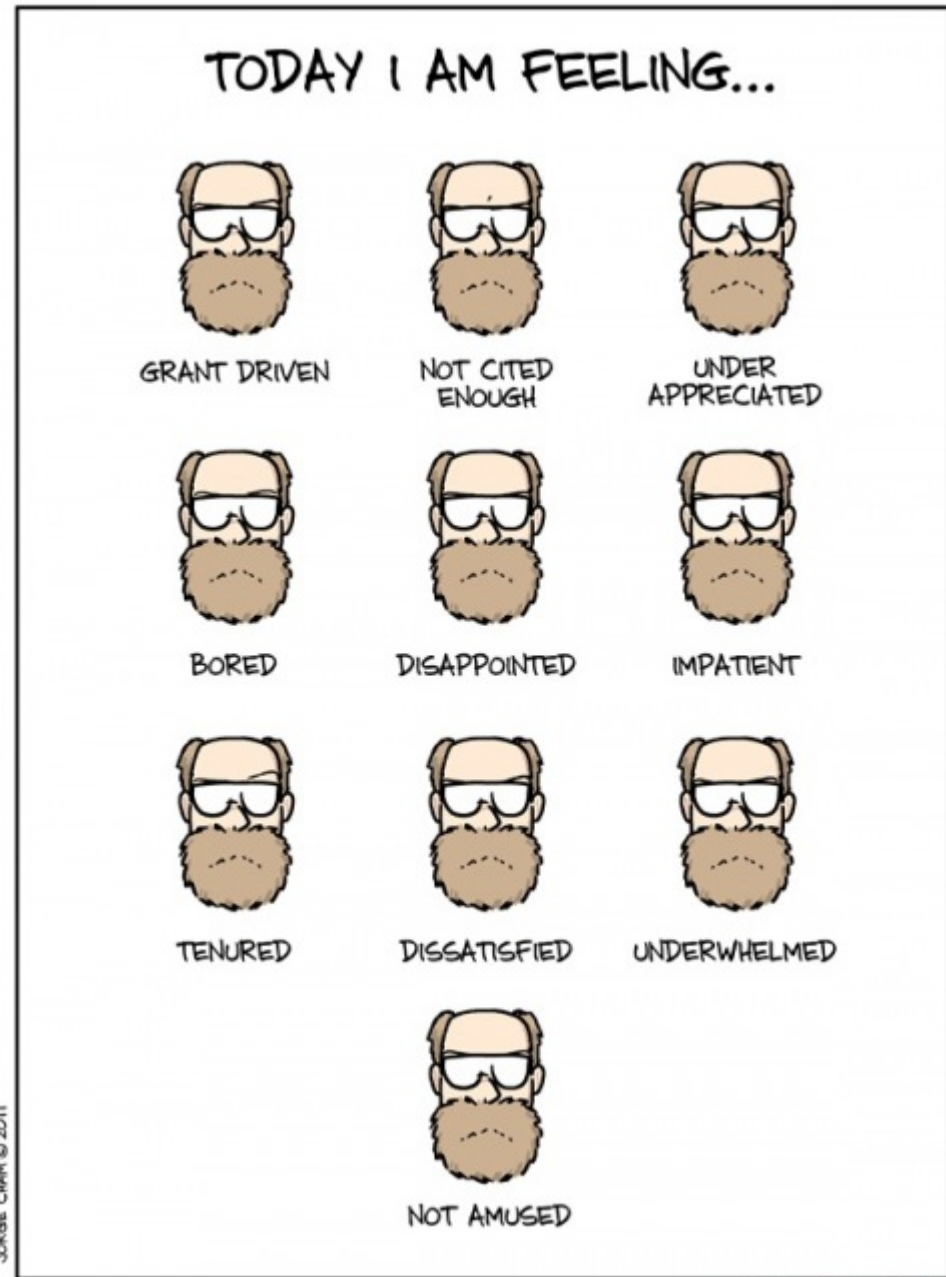
Milestones

Goal

Project manager

## Your supervisor(s)

- Supervisor, not your boss
- Support and help, discuss ideas, co-worker
- Regular meetings
- If it doesn't work...
  - do something about it!!



## Publishing – learn the game

- Write every day
- Find your venues: Conferences, journals, popular science
- Reading improves your writing
- Write every day
- Use your colleagues – drafts need not be perfect
- Write every day
- Reference tool – you do need a system!

**WRITE**

**WRITE!**

**WRITE!!**

# Ethics in the world of publishing

- The Vancouver convention
- Do not submit one paper to several conferences at the same time
- Cite your sources
- Make a contribution in every paper

# Your duties

- The courses and the teaching
  - They spice up everyday life and strengthen your scientific education
- Social life in the corridor
  - Work hours, coffee, lunch, beer
- Engage in your workplace
  - Ex: [www.item.ntnu.no/projects/phd\\_postdoc\\_meeting](http://www.item.ntnu.no/projects/phd_postdoc_meeting)
- Supervise students
  - make them do useful stuff related to your work



## List of Professor-Approved Holidays

When it's ok to not work:

- Christmas (morning)
- The Apocalypse (but you're still going to check e-mail, right?)
- Your Professor's Birthday



[WWW.PHDCOMICS.COM](http://WWW.PHDCOMICS.COM)

# Your freedom

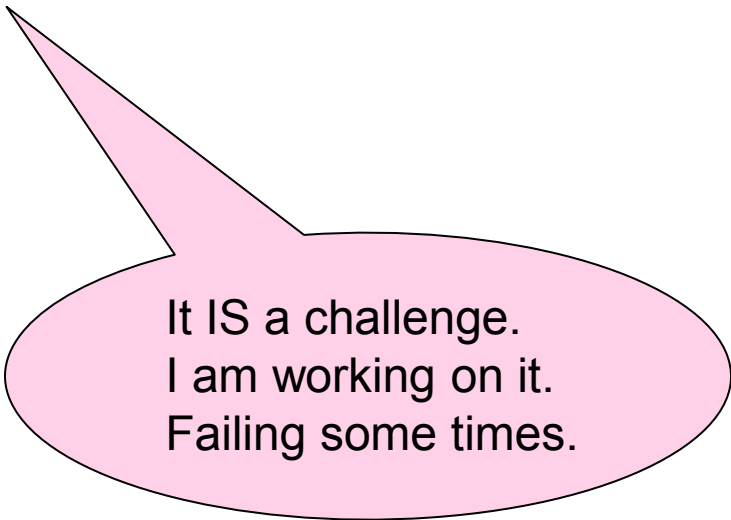
- You are your own boss
- Time priorities – find a balance
  - Saying no to everything: missing a bunch of opportunities
  - Saying yes to everything: wasting valuable time
- Spend an extra hour on reading an interesting paper
- Pursue YOUR scientific interests

## Some general advice

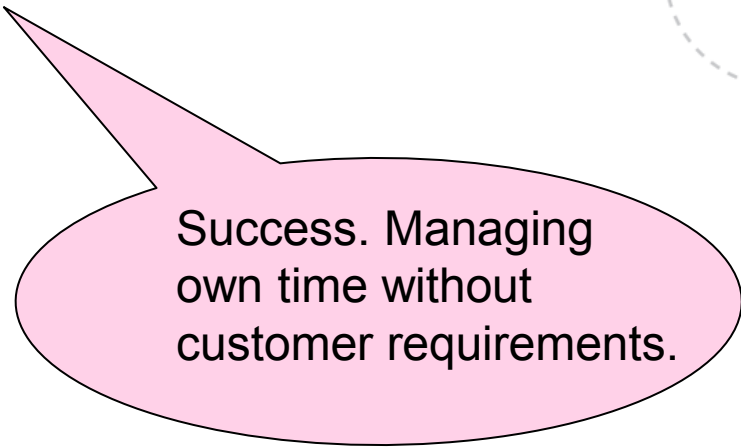
- Put some effort into your research plan
- Create your thesis outline right away
  - You have to create it some time any way
  - ...then you have one place to collect your thoughts and ideas
- Put away (some of) your perfectionism...
  - otherwise you will never finish
- ...there will always be *other things* that should be done...
  - Make sure that you do your stuff, even when it feels hopeless

## My expectations – were they realistic?

- Time to do real research
  - Learn research methods, use them properly
  - Become specialist in one topic – MY topic
- The challenge of saying "no"



It IS a challenge.  
I am working on it.  
Failing some times.



Success. Managing  
own time without  
customer requirements.

# My experiences

- Smart choices – or luck
  - Only one course each semester. Courses from different departments.
  - Keeping my research plan alive
  - Creating my thesis outline early. Choosing thesis=paper collection.
  - Supervising students
  - Duty work closely related to PhD project
  - Having experience from research
  - Relations to the industry
  - Planning 7 months in Santa Barbara
  - Family enforces structure and priorities
- Challenges
  - Creating own deadlines AND keeping them
  - Struggling with narrowing down the scope and identifying possible contributions
  - Writing every day is difficult – *other things* are much easier to do...

# The goal



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# Useful links

- The Vancouver convention  
[http://www.icmje.org/ethical\\_1author.html](http://www.icmje.org/ethical_1author.html)
- Find your venues – the Norwegian register  
<http://dbh.nsd.uib.no/kanaler/>
- Tips on reading a scientific paper  
<http://www.eecs.harvard.edu/~michaelm/postscripts/ReadPaper.pdf>
- For new PhD students  
<http://www.phdontrack.net/about-phd-on-track/>
- A great, must-have, book: *How to get a PhD*  
by Estelle M. Phillips and Derek S. Pugh

