



Information session on the PhD

Faculty of Applied Sciences

November 7, 2018

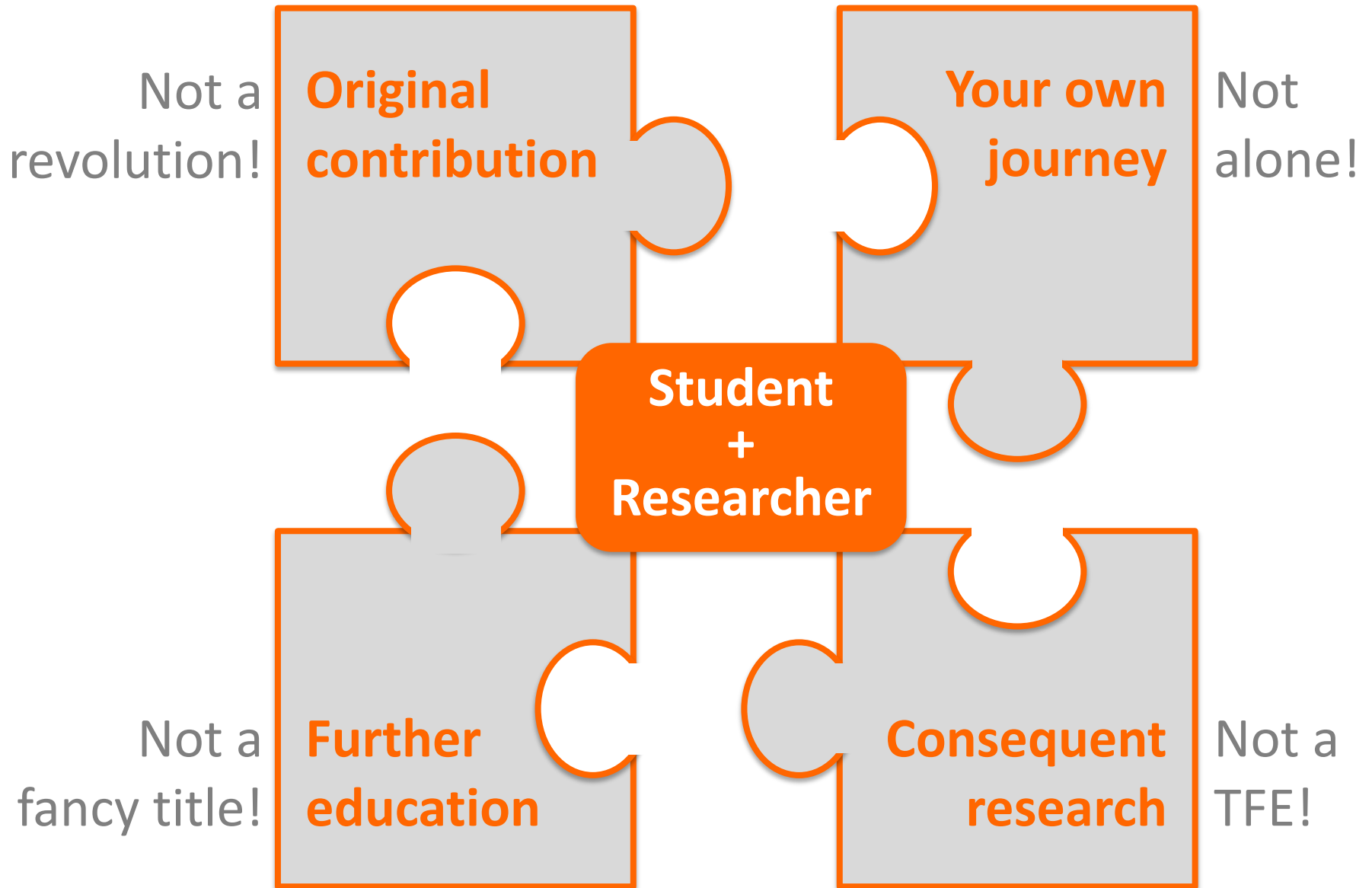


LIÈGE université
Sciences Appliquées

Outline

-
- **The PhD in general**
 - Practical aspects about the PhD
 - Testimony from the industry
 - Posters and informal discussion
-

What is a PhD?




What is specific to a PhD?

International exposure

- Collaborations
- Research stays
- Conferences

Publications

- Journals
- Conferences

- 
- Visibility
 - Feedback
 - Professional network

What will I learn?

To become a scientist

- **Expert** in your field
- **Independent** and **creative** researcher
- **Analytical** and **critical** thinker
- Good **communicator**
- **Collaborator** with other research teams

... and an innovator

- Drive **innovation**
(condition for survival in the future)
- Tackle **new** problems
- Understand **complex** thematic
- **Lead** research teams
- Work **internationally**

Am I cut for a PhD?



Motivated?



Curious?



Independent?

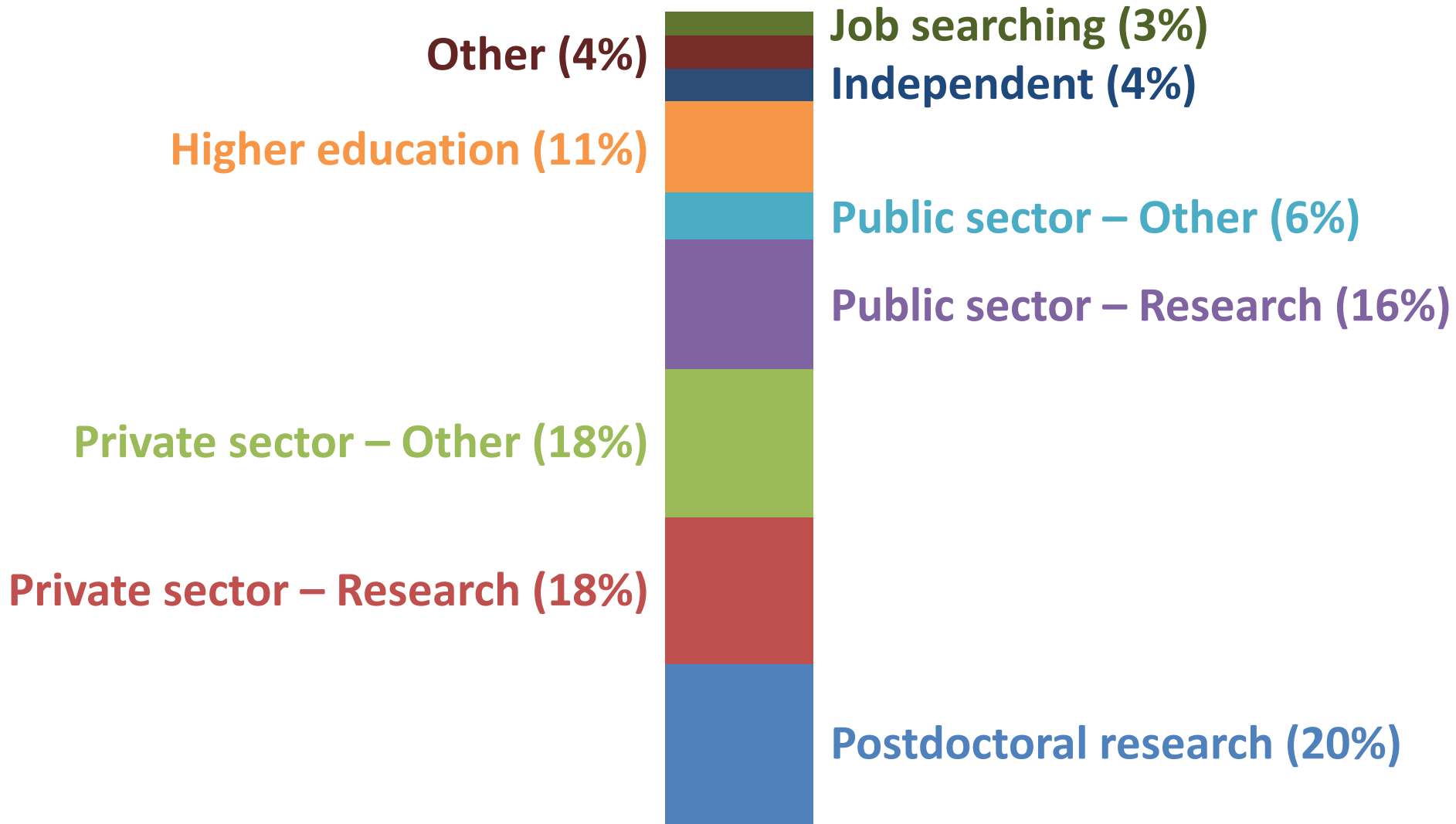


Good PhD candidate

No need to be a genius!!!

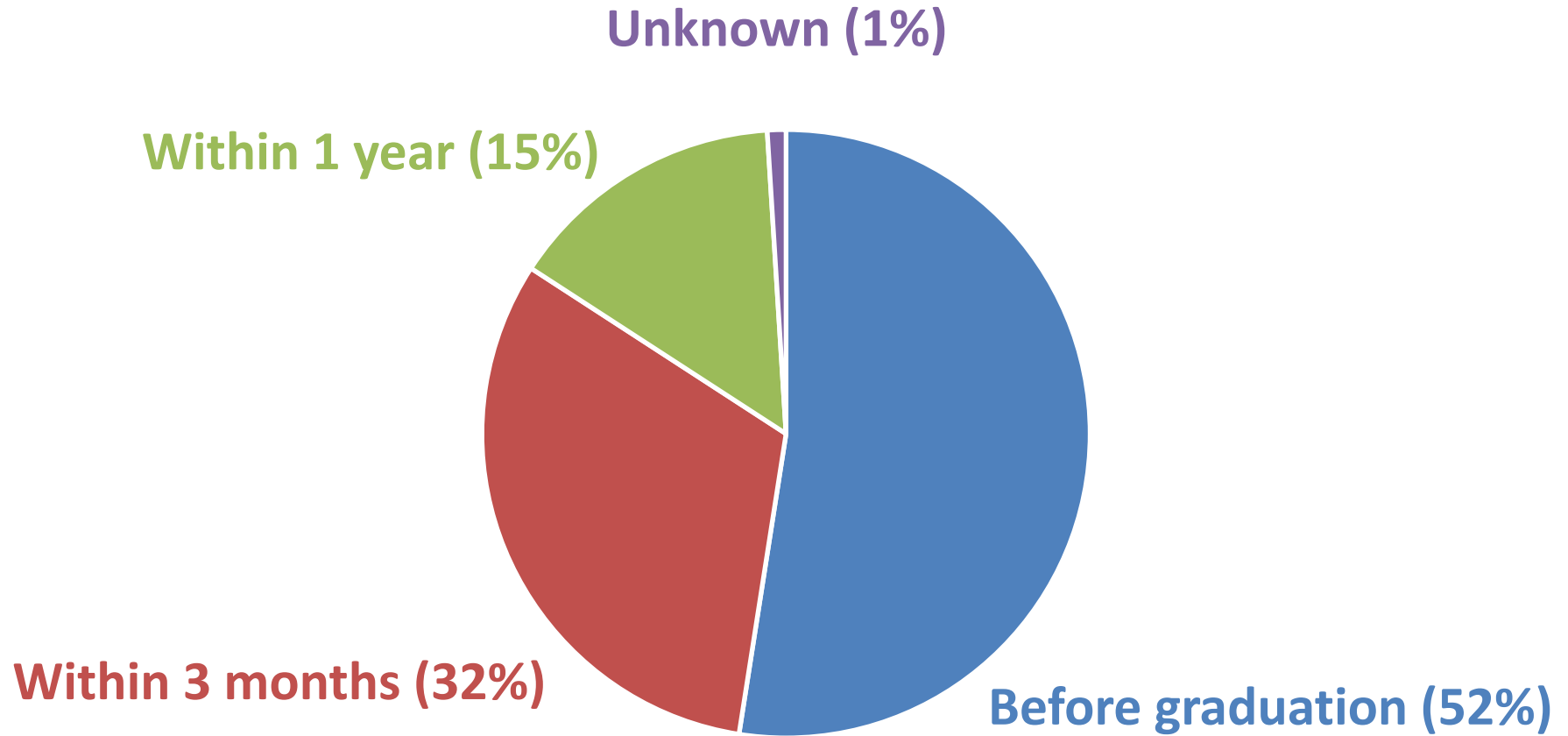
What could I do after a PhD?

Employment after PhD of FSA graduates (2013-2017)



What could I do after a PhD?

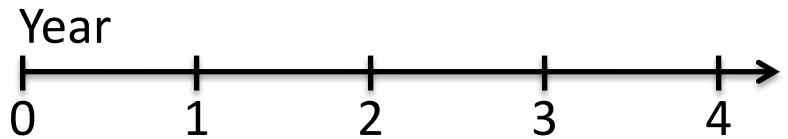
Time to employment (2013-2017)



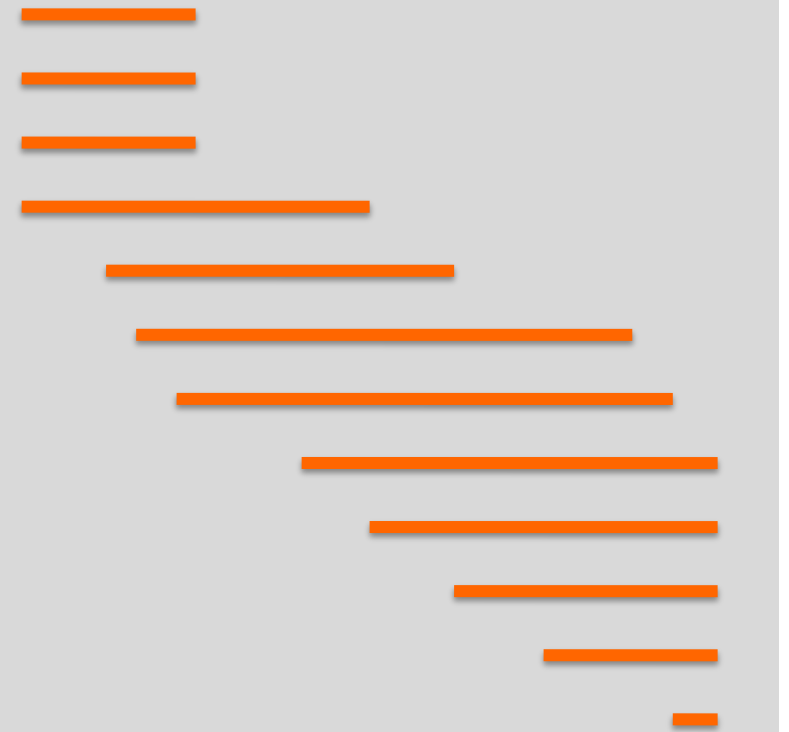
So, how does it work?

Tasks

Approx. timeline



- Familiarization with subject
- Literature review
- Research definition and structure
- Advance courses
- Tools/experiments development
- Measurements/simulations/...
- Results analysis
- Conference presentations
- Papers publications
- Refinements and optimization
- **Written thesis**
- **Oral defense**



What is the role of the advisor?

Advisor = Mentor

A guide to help you ...

- defining and **structuring** your project
- identifying potential issues and **solutions**
- developing your scientific **network**

An evaluator who will ...

- provide **feedback**
- follow your advancement
- **assess** your results

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What are the requirements?

To start a PhD

- Master degree (300 credits)
- Adequate grades (one prior “Distinction”)
- A research topic
- An advisor and adequate funding

To complete a PhD

- Minimum 3 years
- 60 credits of **doctoral training**
- Written **thesis**
- Oral **defense**

What is the doctoral training?

Thematic training

- 3rd cycle courses
- Topical seminars
- Specialized courses
- ...

**Min. 15
credits**

Generic (soft) skills

- Language / communication courses
- Teaching assistantship / supervision
- Research stays abroad
- ...

**Min. 10
credits**

Scientific production

- Conferences and seminars
- Articles in peer-reviewed journals (min. 1)
- ...

**Min. 25
credits**

**Min. 60
credits**

How can I finance my PhD at ULiege?

Funding source	Topic	Deadlines
FNRS Fellowship	Free	~ Feb. 2019
FRIA Fellowship	Free (“industrial”)	~ Aug. 2019
Teaching Assistantship	Free	~ Jun. 2019
Research project	Imposed by project	Case dependent
PhD in company	Imposed by company	None
Other (industry, own funding)	Free	Case dependent

How does it work abroad?

Belgium

Same as ULiege

Abroad

- Often similar to Belgium
- Master thesis is a good entrance door
- Check university website
- Contact potential advisor for availability
- Talk to faculty members at ULiege



USA

- Start application **1 year before** PhD start (deadline in the Fall)
- Need TOEFL + GRE
- Application fee
- Qualification exam (“quals”)

What are the next steps?

1. **Talk** to faculty members and other PhD students about **opportunities** and experiences
2. **Identify** potential **topic** that interests you and **advisor** with whom you would like to work
3. **Discuss** directly with your future advisor about concrete steps to take and funding options

Where can I find more information?

ULiege

- Réseau des doctorants ULiege (www.red.ulg.ac.be)
- PhD at ULiege (https://www.enseignement.uliege.be/cms/c_9096635/en/doctorate)
- PhD in the Faculty of Applied Sciences (https://www.facsa.uliege.be/cms/c_3230106/en/facsa-doctorat)
- Pars-en-thèse (www.ulg.ac.be/books/pars-en-these)

Belgium

- FNRS (www.frs-fnrs.be/)
- doctorat.be (www.doctorat.be)

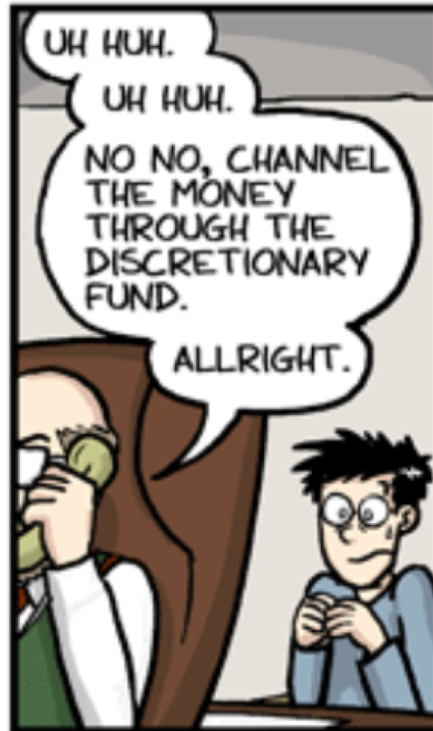
Abroad

- Wallonie - Bruxelles International (www.wbi.be)
- The Belgian American Educational Foundation (www.baef.be)
- Euraxess (www.euraxess.be)
- Fulbright commission (www.fulbright.be)
- Agence universitaire de la francophonie (www.auf.org)
- phdportal (www.phdportal.eu)
- FindAPhD (www.findaphd.com)

Fun

- PhD comics (www.phdcomics.com)

Questions?



JORGE CHAM © 2005

www.phdcomics.com

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Testimony

Philippe GUEUZAINÉ



Emeline GEORGES



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BACKUP

Doctoral colleges

Architecture, Civil engineering and Geology

President : F. Nguyen

Vice-President : B. Dewals

Art of building and urban planning

President : S. Jancart

Vice-President : P. Leclercq

Aerospace Engineering and Mechanics

President : J.-P. Ponthot

Vice-President : L. Noels

Chemical Engineering

President : B. Heinrichs

Vice-President: A. Léonard

Electricity, Electronics and Computer science

President : B. Vanderheyden

Vice-President : B. Boigelot

FNRS fellowship

Duration

2 years, renewable for 2 more years

Topic

Free to chose with advisor agreement

Requirements

Very good track record and very good project

Decision criteria

Application (grades, recommendation, project)

Deadline

~ Feb. 2019 (start Oct. 2019)

FRIA fellowship

Duration

27 months, renewable for 21 more months
(total of 4 years)

Topic

Free topic (industrial/agricultural application)
(letter of support from industry helpful)

Requirements

- Master in Sciences or Engineering
- Good track record and project

Decision criteria

- Application (grades, recommendation, project)
- Oral presentation and interview

Deadline

~ End of Aug. 2019 (start Oct. 2019, but decision
announced Dec. 2019)

Teaching assistantship

Duration

2 years, renewable twice (total of 6 years)

Topic

Free to chose with advisor agreement

Requirements

- Good track record
- PhD advisor support

- **2/3 research**
- **1/3 course assistant**

Decision criteria

Application (grades, recommendation, topic, letter of motivation, needs)

Deadline

~ End of Jun. 2019 (start Oct. 2019)

Research project

Duration

Project dependent

Topic

Imposed by project (some freedom)

Requirements

PhD advisor support + project available

Decision criteria

PhD advisor agreement

Deadline

None (start depends on project)

Doctorate in company*

Duration

4 years

Topic

Imposed by company

Requirements

Be hired by company + project approval

Decision criteria

Project approval by Walloon region

Deadline

None