Value of PhD for society

John J. L. Jacobs

Secretary Federa
Member HEDERA
Vice-president SMBWO
Postdoctoral scientist -> IT

Health(y) Science: Increasing value, reducing waste
Friday November 11th, 2016. Nijmegen, The Netherlands
Climbing up the house of science

HEDERA

Bridge in communication between
- PhD students and postdocs.
- Grant suppliers / government

Defends career interests scientists

Marco Harmsen, Federa
Leendert Looijenga, Federa
John Jacobs, Federa
Marjolein Blaauboer, PostdocNL

Health(y) Science: Increasing value, reducing waste

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Career of biomedical scientists

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PhDs: 100%

Average age: 24 years old
Career of biomedical scientists

- PhDs
- Postdoctoral scientist 30%

Average age: 29.5 years old
Average age: 24 years old

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Career of biomedical scientists

- PhDs
  - Average age: 29.5 years old

- Assistant Professor
  - Average age: 37 years old

- Postdoc
  - Average age: 24 years old
Career of biomedical scientists

- **Associate Professor**: 1.2%
  - Average age: 42 years old
- **Assistant P.**: 1%
- **Postdoc**: 3.3%
- **PhDs**: 94.5%
  - Average age: 37 years old
- **Average age**: 29 years old
  - Average age: 24 years old

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Career of biomedical scientists

- **Postdoc**: 29 years old
- **Associate Professor**: 37 years old
- **Professor**: 42 years old
- **PhDs**: 24 years old
Career of biomedical scientists

0.5% “succeeds”

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Where do 99.5% go?

0.5% “succeeds”
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education
Alternative careers...

.. Require transferable skills
Knowledge driven economy asks Return on investment

✓ Societal investment
✓ Financial investment
✓ Personal investment
What is a Scientist?

Someone with a PhD?
Different people write biomedical PhD …
More people want a PhD …

... with less education

€ 93 K for universities
PhD or scientist?

Multiple tracks towards a PhD

- Traditional scientific education
- Medical trainees before specialization
- Analysts aiming for promotion
- Non-biomedical trained academics
- Teachers upgrading their education

All valuable, but not all PhDs are scientist!

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Super specialists?

- General biomedical training
- PhD thesis is a one topic booklet
- Demonstrating you can do it!
- Scientific career asks for broadening
- Societal career asks for helicopter view

Who needs a super specialists?

Knowing all about nothing.
Scientists beyond PhD

Education for scientist set up and supported by:

- Federa
- Dutch Society of medical scientific researchers (VMWO)
- Various biomedical scientific societies
- Universities / UMCs in the Netherlands

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SMBWO certification

✓ PhD thesis
✓ Quality and quantity of scientific publications
✓ Biomedical education at academic and post-academic level
✓ In depth training and practice in specialization area
✓ General skills for scientist / leaders

Online registration list: www.smbwo.nl

Since 1983
SMBWO-certified recognitions: 2410 scientist
Certification required/recommended for some scientific positions
SMBWO certifies education of scientists

Future plans

✓ Certifications in other specializations
✓ International cooperation
✓ Official recognition of the certified education of scientist

You’re welcome to contact the SMBWO board

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