4-5 October 2018, Copenhagen

Tivoli Gardens

Welcome to day 2 of the conference on The Impact Agenda for Social Sciences & Humanities

AESIS NETWORK FOR Advancing & Evaluating the Societal Impact of Science

ACCOMPLISSH

novo

nordisk

fonden

AALBORG UNIVERSITY Denmark







4-5 October 2018, Copenhagen

Lumbye Hall, 09.00-11.00

Plenary Opening Welcome by: David Budtz Pedersen

Mikkel B. Rasmussen Thomas Alslev Christensen Jane Bjørn Vedel

ESIS

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Plenary opening

Mikkel B. Rasmussen

Co-founder of ReD Associates and director of ReD Associates Europe, Denmark



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Plenary opening

Thomas Alslev Christensen Head of Operations, Novo Nordisk Fonden, Denmark.



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Science and business interactions for optimal impact

By Head of Operations, Thomas Alslev Christensen Novo Nordisk Fonden

ORIGINS OF THE NOVO NORDISK FOUNDATION

The scientists

The clinician:



The investor:

H.C. Hagedorn

August Kongsted

The entrepreneurs:



Thorvald Pedersen

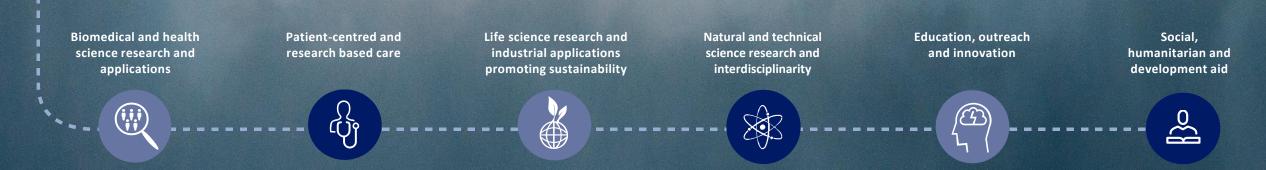


Harald Pedersen

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Marie Krogh

August Krogh



Enable people to live healthier and better lives by facilitating research that advances knowledge of human health and disease, solves health challenges and develops the health care system. Make Denmark a global leader in delivering patient-centred and research based care for peoble with diabetes and facilitate the develop-ment of patient-centred and research based care within diabetes comorbidities and other endocrine disorders. Act for and inspire development of a more sustainable world by supporting research that translates to life science solutions to benefit people and the environment.

Catalyze natural and technical science research, particularly in fields with potential interdisciplinary application to the life and health sciences and industrial biotechnology. Support general science education and cultivate scientific and technical competencies and engagement. To benefit people, promote life science ecosystems that translate scientific discoveries into products and solutions and drive growth. Improve the lives and prospects of vulnerable children and young people through education, developing competencies and other interventions.

Grant-awarding focus areas and long-term objectives

7



Enable people to live healthier and better lives

by facilitating research that advances knowledge of human health and disease,

solves health challenges and develops the health care system. Make Denmark a global leader in delivering patient-centred and research based care for peoble with diabetes and facilitate the

development of patientcentred and research based care Act for and inspire development of a more sustainable world by supporting research that translates to life science solutions to benefit people and the environment. Catalyze natural and technical science research, particularly in fields with potential interdisciplinary application to the life

and health sciences and industrial biotechnology.

translate scientific discoveries into products and solutions and drive growth.

Support general

technical competencies

Improve the lives and prospects of vulnerable children and young people

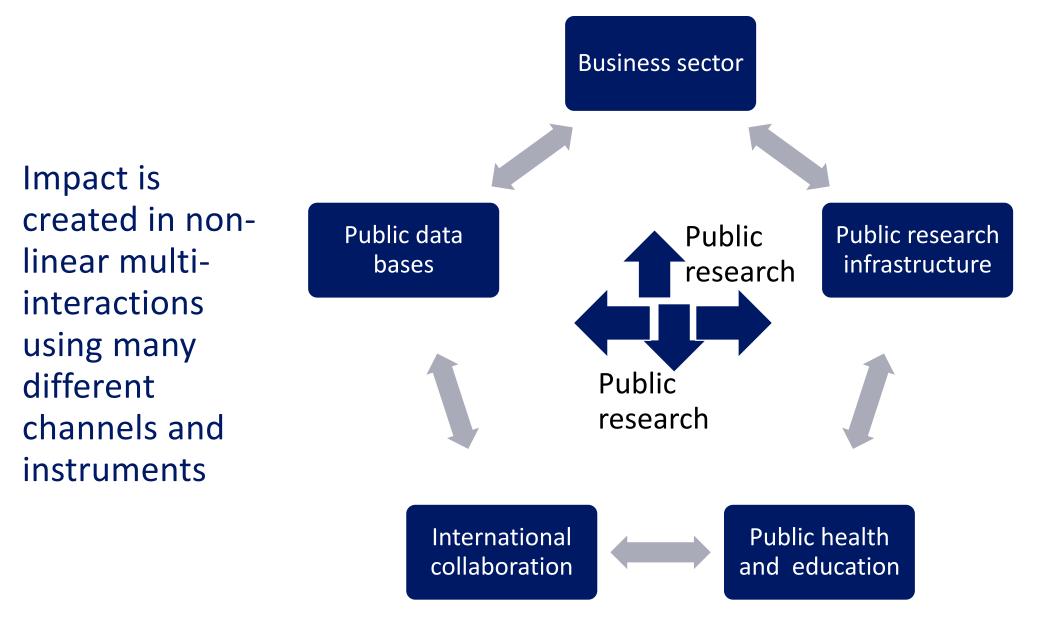
Roles of private foundations



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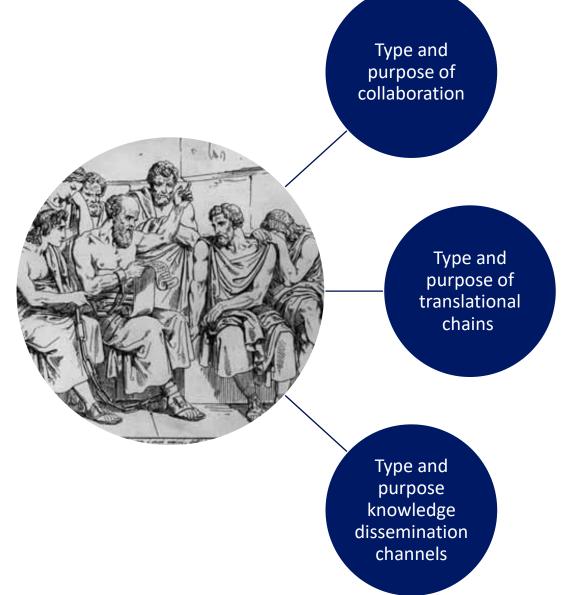
Translation from research to business





Strong motivations on both sides (research & business) indicate positive impact

Optimal impact can be promoted in several ways



Social science documents positive impact on:

- patent activity, innovations, new services and products
- Citation impact and scientific discoveries
- productivity, income, job creation and solutions
- concrete solutions to societal challenges
- Improved health and life perspectives

From public research to patient health

Public research activity

Clinical guidelines

General practitioners

Patients







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Research activity conducted by the recipients of Foundation grants and published in journals. Grant recipients have published 14,429 journal articles since 2000.

53% of the diabetes guidelines and 18% of the cardiovascular disease guidelines in Denmark and elsewhere reference journal articles by recipients of Foundation grants.

General practitioners continuously update their knowledge from multiple sources.

79% of general practitioners acquire knowledge about the treatment of diabetes and cardiovascular diseases from clinical guidelines; 65% acquire knowledge from journals, and 28% from journal articles. 74% of the general practitioners say that clinical guidelines have resulted in more uniform treatment of their patients.

23% of the general practitioners say that using clinical guidelines has improved the health of their patients, and 33% say that using guidelines has made treatment more effective.

From public research to innovation activity in firms

Public research activity

Collaboration







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Public research funded by the Foundation.

In 2017, recipients of Foundation grants collaborated with 266 companies in 351 collaborations; 26% of the companies were Danish.

Journal articles

Patent activities and citings



Grant recipients publish their research in scientific journals.

Industrial researchers co-authored 11% of Foundation-funded journal articles.

1 of 16 funded journal articles cited in patent applications and patents.

2600 citings of funded journal articles in more than 2100 patent applications and patents.

Recipients of Foundation grants reported 115 patent applications and 13 patents between 2013 and 2017.

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Jane Bjørn Vedel

Assistant Professor Research and Innovation, University-industry relations at Copenhagen Business School



Friday 5 October, 2018

The impact debate and approaches to science-business interaction in SSH

Jane Bjørn Vedel, Copenhagen Business School





Background

Conducted research on science-business relationships since 2009 (+ I'm a social scientist with an industrial PhD)

Advisor roles since 2014: collaboration with senior economists in leading consultancy firms and OECD on impact issues

Current research project = "The socioeconomic impact of research-based education", funded by NNF 2017-2020





General observations on the impact debate

Current research project – approaches and findings

What are the implications for the field of SSH?



Initial observations

'Impact' often understood based on a linear model of innovation

Strong focus on <u>outcomes</u>

Problem: It generates too simple ideas of science-business interaction and societal impact



Alternative approaches

Impact based on a <u>co-productionist model of innovation</u>

Impact understood as change

For better or worse – not merely for optimal impact



Current research

"The socioeconomic importance of research-based education" "The role of the private sector in public research institutions"

How does the private sector shape research and education practices in public research institutions?

Example: private funding

Methods: Qualitative research; pilot 2017, full study on now.



Preliminary finding

Respondents characterized the private grants as long-term, large scale and flexible.

They reported that the grants had changed:

- the dimensions of their research
- their career trajectory
- the conditions for educating next generation

But also challenges related to receiving large grants



Implications for SSH?

Expand the notion of 'science-business' (rethink the model)

Broaden the notion of impact – outcomes? Changes?

Ensure 'optimal reflexivity' in the impact debate



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Q&A

David Budtz Pedersen (chair) Mikkel B. Rasmussen Thomas Alslev Christensen Jane Bjørn Vedel



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Up next

10.15-11.00 Roundtables

AESIS

White:	Strategic role of research foundations	HC Andersen Castle
Red:	Training & skills for impact	HC Andersen Castle
Blue:	Evidence-informed policy	Gemyse 1
Yellow:	Creative entrepreneurship	Gemyse 2
Green:	Institutions and leadership	Lumbay Hall
Brown:	Regional Collaboration	Lumbay Hall