

The Department of Management, Strategy and Innovation, KU Leuven is organising

the 15th Workshop on THE ORGANISATION, ECONOMICS AND POLICY OF SCIENTIFIC RESEARCH 7-8 April 2022

"Trends and Challenges for Science funding" Program

8 April 2022, 14-17pm Leuven, Belgium Naamsestraat 69 Auditorium Jacques Vander Eecken

Speaking notes, Thomas Alslev Christensen

- O. The most important challenges and trends from the perspective of a non-public science funders operating within the overall science eco-system might deviate in several ways from the views of public science funders and public researchers.
- 1. First: What is NNF an enterprise Foundation with philanthropic and corporate activities. 100 years old. We support free research, no ownership to IP, freedom of publication and of research methods. 7000 people are annually partly or fully funded by the Novo Nordisk Foundation. Last year we funded 1.2 billion euro.
- 2. Follow the same international standards in grant-awarding as public science funders: in open competition we use 28 committees with national and international experts. In top-down initiatives we use international peer review. Grant-awarding principles: excellence, collaboration, originality, knowledge-sharing and diversity
- 3. Research landscape in Denmark and other countries. Different financing models. Denmark exceptional when it comes to enterprise foundations' funding of public research (½-2 pct. in other countries in Europa, 20-22% in Denmark). Hence, we start to fund research in other countries. The last 5 years we have funded research for more than 400 million euro outside Denmark.

4. Challenges:

- a. license to operate as a large non-public science funder,
- b. supplement public research instead of substitute,
- c. universities might not be able to absorb money from private funders
- d. convince researchers that we support free research and do not interfere in methods and results
- e. access to talent is limited to recruitment of talent abroad
- f. ensure transparency in grant-giving and high-quality standards,
- g. find peer reviewers,
- h. support interdisciplinary research,
- i. monitor and evaluate initiatives to create evidence for what works, what does not work,
- j. assess and communicate the societal impact of science
- k. identify new areas of research that can deliver solutions to societal challenges in the long run

5. Advantages of being a non-public research funder:

- a. long-term perspective,
- b. no focus on immediate impacts,
- c. geographical spread of funding possible beyond national borders
- d. possibility during year to increase funding to stabilize approval rates,
- e. flexibility in budget and funding instruments,
- f. not subject to political influence,
- g. experiments in funding instruments possible,
- h. several grant-awarding models and instruments (open competition, strategic standalone, partnerships, impact investments, own initiatives, mission driven initiatives etc.)

6. Trends in Denmark:

- a. more new experiments,
- b. more fundamental research,
- c. more long-term funding in larger research centres,
- d. more research infrastructure,
- e. more focus on career programmes,
- f. more impact assessment and theory-of-change frameworks,
- g. more mission-driven approaches,
- h. more focus on diversity,
- i. more interdisciplinary approaches,
- j. more focus on societal impact outside research environments,
- k. more focus on long-term benefits for people and improvement of climate and the planet

Our principles for grant-giving

EXCELLENT: We promote the highest standards of quality. \rightarrow We are committed to promoting excellence and quality through all our activities. Only by setting a high standard can real, sustainable impact be achieved. This includes both supporting world class research in selected areas and collaborating with relevant organisations to address educational and societal issues.

INNOVATIVE: We strive to advance original and bold ideas. \rightarrow We encourage new ways of addressing challenges facing people and society. To do so, we are prepared to take risks to support promising projects and create the basis for breakthrough solutions, acknowledging that creative and innovative approaches are sometimes necessary to solve the most complex and intricate problems.

COLLABORATIVE: We promote international collaboration and interdisciplinarity. \rightarrow We strive to bring together different ideas and perspectives to tackle challenges and develop solutions in new ways. By removing the barriers between traditional disciplines, institutions, sectors and geographies it is possible to find new and more effective ways to solve complex problems.

KNOWLEDGE-SHARING: We champion transparency and broad access to scientific knowledge. → We promote openness and broad dissemination of knowledge and data in accordance with the FAIR principles. Making scientific knowledge and results available to other people is pivotal to catalysing further advances in any field. Furthermore, we see transparency as a prerequisite for trust and accountability.

DIVERSE: We promote diversity, equity and inclusion. \rightarrow We embrace diversity and inclusion and the ability of these to create an environment that enables fairness by removing bias of existing systems, nurturing talents and innovative ideas, regardless of gender, age, geography and experience.

Our principles for societal impact

- 1. Fostering the development of talent across different genders, life ages and scientific fields
- 2. Supporting organisations, systems and infrastructure to catalyse knowledge-based societal development
- 3. Stimulating collaboration across international borders, scientific disciplines and sectors in society
- 4. Promoting excellent research and innovation
- 5. Developing innovative products and solutions supporting a sustainable development
- 6. Developing new technologies, therapies and patient-centred and research-based care and disease prevention
- 7. Creating jobs, sustainable growth, efficient use of resources and productivity in society
- 8. Supporting the development of world class education at all levels and of a qualified and agile workforce
- 9. Helping people in difficult health, social, environmental and humanitarian settings