Self-evaluation

GROW-Research Institute for Oncology and Reproduction Maastricht University

2018-2023

Creating impact through collaboration and community building

PART A Documentation at the level of the research institute

Summary

GROW-Research Institute for Oncology and Reproduction is one of the research institutes of the Faculty of Health, Medicine and Life Sciences (FHML) at Maastricht University. GROW's divisions (GROW Oncology and GROW Reproduction) are collaborating strongly with other FHML Research Institutes and MUMC+ patient care centres and are well positioned in regional networks. GROW Oncology is part of the OECI accredited Maastricht UMC+ Comprehensive Cancer Center (MCCC), which collaborates in the OECI accredited Oncology Network SouthEast Netherlands (OncoZON). GROW Reproduction scientists are leading innovation in prenatal genetic testing, which takes place in the only licensed preimplantation genetic testing (PGT) clinic in the Netherlands at MUMC+ and are innovating the care for (pregnant) women and newborns. The central position of GROW in regional networks and the strong collaboration with the affiliation professors provides a unique basis for impactful translational oncology and reproduction research. In this self-evaluation, we have reflected on GROW's strategy, actions, and scientific and societal achievements in the period 2018-2023.

The last six years have focussed on redefining what GROW aims to represent: a translational research institute which contributes to survival with preservation of function of patients with cancer (GROW Oncology) and the best possible start for future generations (GROW Reproduction). Collaboration and community building have been key to all our activities in the last six years. We have introduced the GROW community platform (containing all information on GROW) and revisited all departments to present the support that GROW can offer. In addition, we developed the PhD programme for internal and external PhD students. We have established a scientific advisory board and expanded and empowered the GROW MT. The new MT has developed strategic plans for all four GROW programs. We have strengthened our local, regional, national and international collaborations to accelerate knowledge discovery and implementation. In addition, we critically evaluated our policy on diversity and social safety.

The results of our strategic actions in the last six years are being reflected in the output parameters that we have chosen as defined by the SEP protocol. Keyword analysis of the scientific papers published indicate that GROW scientists publish on the strategic topics that we have defined. The top 20 national collaborations include the organisations of the GROW's affiliation professors. Despite a slight decrease in permanent scientific staff and the COVID-19 pandemic, the total research staff, the number of scientific publications, the external funding and number of PhD defences have increased in the review period. In addition, the percentage of refereed articles published as Open Access has increased substantially. The increase in scientific output has not compromised the quality and the impact of the scientific output. 22.6% of the total output of GROW belongs to the world's top 10% documents concerning citation impact, 3.5% belongs to the top percentile. The average CNCI of GROW is well above world average and consistently ranges around 2. GROW's research is most connected to society via research that is cited in clinical guidelines. 13% of the total number of internal PhD candidates defended their thesis within four years after the starting date, whereas 58% defended within five years.

Reflecting on our achievements also enabled us to identify the topics that need attention. We realize that the connection between GROW Oncology and GROW Reproduction is still weak, that the overall awareness on developments in/and application of AI, FAIR data and Open Science is limited, that the participation and success rate in EU funding calls is low and that GROW support for personal development has been focusing on PhD students, while

GROW support for postdocs and permanent staff has been minimal. In addition, the most important stakeholders of our research, the (future) patients, are not involved in the development of the GROW research and training agenda.

Therefore, in the next six years, we will stimulate research overlapping GROW Oncology and GROW Reproduction by supporting research on prevention, lifestyle, the microbiome, and the immune system. We will develop AI training programmes for GROW scientists and will further stimulate and facilitate Open Science in the broadest way. In addition, we will increase (future) patient involvement in the GROW research agenda and educational activities. Furthermore, we will invest in our postdoc community and permanent staff by providing fellowships for external visits. In addition, we will stimulate EU funding applications by funding writing support and by training GROW scientists.

We are optimistic about GROW's future. The reorganisation and way of working of the GROW MT provides a viable basis for the future of GROW. The critical but very supportive advice of our Scientific Advisory Board will help to further develop GROW. Despite the expected budget cuts at FHML-level and political developments, we are confident that we can continue to perform clinical and societal impactful research.