

Reaction to the comments/advice by the CRCG research institute

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The management team (MT) of the Cancer Research Center Groningen (CRCG) institute is generally pleased with the report of the assessment committee. The assessment shows that CRCG research aligns very well with the UMCG research strategy, that it effectively integrates clinical and preclinical research, aligns with patient care through the UMCG Comprehensive Cancer Center, and that a 'high value' patient cohort (*OncoLifes*) is well embedded within the research programs. The MT is very pleased with the observed excellent social cohesion within the institute, the organizational focus on patient benefit and the large opportunity for societal impact.

The assessment committee also provided clear recommendations for improvement by the CRCG institute, particularly in the field of societal impact, open science and diversity. Below we discuss these recommendations and provide answers and formulate action points to address these items.

Research Quality

- *The CRCG would benefit from a clarity of what they value. For example, is it volume of publications; graduate attributes; innovation; societal impact; health benefit. This could be reflected and consistent with recognition and reward programs.*

Over recent years, assessment of research quality has been discussed intensely, including at the UMCG governance level. In line with the [DORA](#) declaration, which the UMCG has endorsed, the institute has shifted its focus to Field-weighted Citation Impact (FWCI) analysis, rather than volume of publications or journal impact factor.

Overall, the most important value is to make discoveries that matter. For CRCG, obtaining fundamental insight into cellular processes that ultimately, via development of novel therapies, lead to improved patient care is the main strategy. Obviously, values of research differ between projects and researchers. CRCG will continue to use customized analyses, including publications with both clinical and preclinical authors as a measure of translational work. CRCG will further stimulate researchers that engage in Open Science, by providing an (online) communication platform. We strive to measure and reward 'impact' of our research.

With regard to this societal impact, in 2019-2020 CRCG participated, as one of the first, in an UMCG initiative to create more awareness and support for societal impact, since this plays an increasingly important role both in obtaining funding and in the expectations of society and politicians. One of the main aims of this initiative, called OASIS ('Outreach and Societal Impact Support' of the [UMCG impact team](#)), was to create awareness of the CRCG programs with respect to societal and scientific impact. Clearly this also concerns attention for collaborations with stakeholders outside of academia (through communication via the CRCG and UMCG website, and other forms of (external) communication).

- *Strategic development of new programs based on justified needs, interest and likelihood of a competitive advantage in developing specialized expertise within the Netherlands, Europe, and internationally.*

The CRCG agrees with the comment of the assessment committee that the institute should critically review and update its research program. During focused workshops with CRCG MT, CRCG program leaders and CRCG researchers, in conjunction with the Dean and Dean of Research, CRCG will define (new) research focus areas based on performance metrics, and scientific as well as societal impact.

In addition, a new UMCG research strategy is currently under development (as part of an overall new UMCG strategy, 'Koers25'). CRCG will keep a close eye on the developments and will realign its mission and strategies in line with new direction of UMCG, in which proton therapy, molecular imaging, translational research, long-term consequences and cellular (CAR-T) approaches will form important building blocks of the new CRCG research strategy. These strengths will help to expand specific niches that place CRCG in a good position for future collaborations and funding.

- *A greater participation, influence and leadership in consortia is to be encouraged, including Oncode and other national- and international consortia.*

CRCG recognizes the importance of participation in key national and international (research) networks and organizations. The CRCG, together with the Dean and Dean of Research, will (start to) proactively scout researchers to play an active role (as leaders or participants) in the [Mission Cancer programme](#) or other funding programs of the EU (i.e. [MSCA Doctoral Networks](#)). On a national level, CRCG strengthened its position in 'Oncode' through participation in the [Oncode-PACT](#) of the 'National Growth Fund'.

Societal relevance

- *The CRCG would benefit from a clear vision for Societal Impact which makes clear what it aspires to and what its specific impact vision is (set goals and standards/expectations).*

Also see our response to the first recommendation of the assessment committee ('make discoveries that matter', see above). In our opinion, we help society and health care the most with new (groundbreaking) discoveries that matter. Discoveries that can prevent disease, make treatments more patient-friendly or shorter, and/or improve patients' quality of life.

CRCG also agrees with the committee that a Societal Impact strategy is an area where the CRCG, and the UMCG as a whole, can grow. We will follow up on the recent OASIS initiative to identify relevant stakeholders of individual researchers and research programs.

Furthermore, the UMCG is currently in the process of establishing an *UMCG Innovation Center*, which is aimed at developing and valorizing scientific knowledge and discoveries. The CRCG will actively participate in this new center.

- *The quality and relevance of CRCG research would benefit from putting in place pathways and support to nurture and proactively manage the impact pipeline.*

Based on our experience with the OASIS initiative and our opinion that new discovery matter, it is, in our view, important that institutes will have access to dedicated impact officers and/or

liaison officers with whom the management team and research programs can have regular meeting to discuss a communication strategy, identify routes to connect with relevant stakeholders, explore funding opportunities, etc..

Viability

- *Improved strategic planning at more central levels to guide project development and potential personnel; need more support from UMCG so leadership can facilitate further connections in priority strategic areas consider mentorship program*

The current mandate of research institutes, i.e. to appoint new research staff and/or to make strategic investments to strengthen their position, is limited, because the main responsibility for appointing new research staff and directing the research strategy/strategic investments lies within the UMCG departments.

As mentioned before, UMCG is currently working on a new governance model for its organization (*Koers25*), in which also the mandate of research institutes and governance thereof are evaluated. CRCG will proactively engage in these discussions, with the aim to established research institutes with increased mandate to allow a further focus on our research strengths, and to further integrate clinical and preclinical cancer research. As part of these discussion, CRCG will explore how mentorship and leadership programs can be effectively incorporated within the CRCG, in alignment with more centrally organized support.

- *CRCG is a relatively large institute and part of a very large organization (UMCG). Individuals and groups show elements of good practice and integrity. It is important to ensure that individuals at all levels are well informed about policies, procedures and expected behaviours across the organization.*

The CRCG underscores good research practice and integrity. Informing (new) PhD students and staff about policies, procedures and expected behavior within the UMCG is largely arranged at the UMCG corporate level, incl. mandatory courses on research integrity for PhD students and UMCG confidential advisors (for raising issues of unwanted and/or transgressive behavior). From the interviews of CRCG researchers with the assessment committee CRCG learned that not all researchers are fully aware of these policies. Where and when appropriate/necessary, the CRCG can and will be instrumental as a platform to better inform researchers.

- *Good recognition by CRCG leadership of importance of diversity, but current efforts on diversity/inclusion appear to be strongly centered locally, more harmonized at different levels and parts of the organisation. Recommend stronger institution level focus to minimize potential for heterogeneous implementation in individual research groups.*

The CRCG recognizes the assessment committee's observation that at the MT level diversity is an issue. However, at the research program level diversity is much more balanced. In the short term, due to regular rotation, renewal of members of the management team will take place. In the coming replacement round, CRCG will strive for a more balanced distribution with

regard to diversity. Not only focus on male/female, junior/senior staff and/or clinical/preclinical staff, but on ethnicity and international participation. In addition, the CRCG intends in the future to seek greater diversity in composition for all committees and groups (i.e. programme leaders, PhD Council, etc.) within the CRCG.

- *Consolidation and co-location of oncology research labs and groups as much as possible is recommended.*

A strong wish of CRCG preclinical researchers is to be centrally located/housed, since many of the daily techniques and the expertise is shared. This aspect will be addressed in a new UMCG research building of which completion is foreseen in 2027.

Currently, an inventory is made for the required design, equipment and positioning of research groups. A representative from the CRCG MT takes part in these discussions to secure an optimal grouping of oncology research groups. Special attention in the re-location of research groups is needed to maintain effective interactions between preclinical and clinical researchers.

- *Realistic strategic positioning of the CRCG portfolio in relation to other Cancer organisations in the Netherlands and world-wide in order to maximise opportunities for collaboration, expansion and contribution of unique strengths, resources and assets.*

As mentioned above, a new UMCG research strategy is currently under development (part of *Koers25*). CRCG will keep a close eye on the developments and will align its mission and strategies with new directions of UMCG and in line with strategies of other Cancer organizations in the Netherlands and world-wide. We aim for a unique niche of our own, in which translational research, proton therapy, molecular imaging, well-annotated longitudinal biobanks, long-term consequences, cellular (CAR-T) approaches and mouse PDX models (to translate from in vitro to in vivo to clinical trials) form important building blocks.

CRGG strives for labs where both fundamental as well as translational studies are conducted, and which are directly embedded within clinical departments, which allows efficient clinical translation. These ambitions also match with the UMCG on a corporate level: cohorts, data-driven, innovative methodology to translate fundamental insight to clinical implementation.

To also achieve a better strategic position, CCC and CRCG have initiated accreditation by the Organization of European Cancer Institutes (OECI), which provides peer support in further developing our cancer center, and provides even closer access to an organization of highly ranked cancer institutes, many of which we already collaborate with.

Finally, we actively discuss in the board of the CCC and the CRCG MT how the CRCG can effectively participate in (inter)national committees. At the UMCG corporate level, research strategies are discussed between Academic Medical Centers (NFU), where we provide input when discussions concern cancer research.

In conclusion, the CRCG is pleased with the assessment committee's positive evaluation of the research quality, the social cohesion of the CRCG research community and the societal impact of our research. Moreover, we thank the committee for the constructive feedback and will work with the CRCG management team, program leaders and CRCG researcher to address the improvement points to further strengthen the quality and viability of oncological research at the UMCG.