

Response to the recommendations in the UMCG research evaluation 2021

General comment: The UMCG is currently in the process of restructuring its organization. The reorganization process is called Koers25. A major question concerns the format of the research governance: the research institutes and its programmes. Koers25, which is designed as a participatory process, is expected to come to a close at the end of this calendar year, when a final decision will be made on the new organizational structure. Clearly, the outline of the new institutes and its relationship with the departments and new clusters can be defined only towards the end of the Koers25 process.

Research Quality

1. *Develop the full potential for genuine interdisciplinary research. This could be improved through adjusting or reforming existing organizational mechanisms.*

Currently the research organization is being evaluated and reformed. In the design of the new research organization stimulating interdisciplinary research is an important goal. It has been formulated as one of the focal points of attention by the UMCG Board of Directors for 2023. Interdisciplinary research is a primary goal of koers25, many choices in the research structure are based on interdisciplinarity.

2. *Ensure good, fair management and equitable access to technologies and central services.*

In principle, all central services and facilities are equally and easily accessible to all UMCG employees. However, not everyone is aware of their existence. We put much effort in improving the visibility of these services and facilities. Moreover, we are in the process of bringing them all in the same administrative framework, easing information, access and administrative aspects. This system is expected to be up and running in 2023.

3. *Include and embed diversity as a driver to promote better problem-solving and decision-making in research*

Most major changes and decisions in the UMCG are prepared by so called *leading coalitions* (committees). To take into account everyone's interests and voices, the UMCG will make sure to include a diverse set of stakeholders (gender, age, discipline, background) when creating a committee and when taking a decision in research (involving also end-users such as patients). In addition, an online tool is being developed to help researchers include a diverse set of perspectives in project design and development.

This aspect is also an explicit subject of the departmental strategic personnel planning which is a routine subject of management discussions between departments and the UMCG Board of Directors, starting in 2022. In the future UMCG governance model, institute directors will also be involved in this planning.

Societal relevance

The committee acknowledges the UMCG's investment in the road from basic research to clinical application. The UMCG's embeddedness in the region was also recognized as promoting societal relevance. While the UMCG's efforts on an institutional level were praised, the committee notes that these efforts don't always find their way into the individual research Institutes. A better connection could more effectively use the substantial impact potential that the institutes have. The UMCG recognizes this analysis and will strengthen and improve the connection with the researchers on the topic of societal relevance.

4. Develop a clear vision for societal impact that can be operationalized.

The UMCG endorses the recommendation of the committee(s) to strengthen its vision on societal impact both at the corporate level and the level of the institutes. With emphasis we will develop and implement a vision on the involvement of end users like patients. This extends the currently available tools.

Although the UMCG has a wide variety of types of societal impact, an important type of societal impact is the translation of more fundamental research outcomes to clinical impact. The UMCG stimulates collaboration of clinical researchers with the pre-clinical researchers in its research institutes. In the coming years, the institutes will continue to stimulate translational research and develop approaches to societal impact that are suited to the types of research that they are doing. They will be supported by the UMCG Impact Team. The UMCG Impact Team has started a program of so called 'Horizon Scanning' sessions. These sessions, performed at the level of the research institute, will identify 'pathways to impact' that fit well with the research lines that are addressed by the programmes within the institute. The Horizon Scanning sessions will identify in which areas societal impact will need to be strengthened. This approach will also allow for identification of indicators with which to measure the attained impact on a rolling basis. The individual institutes' horizon scanning sessions together will form the broad UMCG impact policy. This impact strategy is complementary to the start of the UMCG Innovation Center, which will pick up promising research leads with the aim to bring them to the market (be it patients or other parties).

5. Formalize knowledge exchange, innovation, and entrepreneurship

A vision on innovation will be a standard topic of the annual progress meetings of departments with the board of the UMCG, starting in 2022. Together with the University, plans to formalize knowledge exchange and entrepreneurship will be elaborated. As mentioned above, the newly started UMCG Innovation Center will play a key role in identifying viable leads and supporting knowledge transfer of these leads. For example, the collaboration with FSE in HTRIC aims to strongly enhance the innovation and knowledge exchange in medical technology.

6. Fuel the talent pipeline for impact awareness, by developing training and career development for PhD students and for early-stage researchers that enhance societal relevance.

The UMCG will follow this advice. The UMCG Impact team is already running training sessions on societal impact for PhDs. Similar training at the postdoc level is currently in progress.

- 7. Continue reforming the promotion system so that work with societal impact is recognized and rewarded.*

The UMCG impact team has initiated a discussion internally about a societal impact strategy for research groups and ways to monitor the KPI's per group on a BI dashboard. The UMCG foresees that this will enable departments and institutes to value and strengthen impact activities as much as scientific activities.

A career development path in the direction of societal impact & knowledge transfer is already in place. We support a system, based on 'recognition and rewards' in which careers can be differentiated, with the possibility to be promoted for those who aspire a career with a focus on societal impact & knowledge transfer. Although we agree that awareness of knowledge transfer and societal impact is important for all, we do not regard success in this direction to be a prerequisite for all career paths.

Viability

- 8. Simplify the organization (regarding both structures and procedures).*

Currently the organization of the UMCG is being evaluated and reformed (Koers25). Simplification is one of the aims. This reorganization of institutes and programmes will be implemented as of January 2023.

- 9. Work towards a functional integration of the UMCG central services so that they are more visible.*

UMCG research support increasingly collaborates with the research institutes to be better visible for both the institute MT's and the researchers on the work floor. In the new organizational structure these efforts will be increased. See also our answer above. Furthermore, a recent facility at the intranet shows a concise and effective overview of the services offered including contact details.

- 10. Develop policies at the central level that more fully integrate clinicians in the research environment and take into consideration the realities and complexities of employment contracts and career pathways.*

We currently already have a dedicated career development path for clinician-scientists. However, we notice that these people struggle with the time they can allot to the various tasks. Therefore, the UMCG has created fellowships that will give clinicians time to develop their research and to connect with (pre)clinical research. This connection is part of pillar 2 of the new UMCG Koers25 strategy and is an important route to societal impact of an academic hospital.

- 11. Develop a comprehensive policy in order to become more competitive at obtaining large collaborative and personal grants.*

The UMCG noticed already a few years ago that competitiveness in large collaborative and personal grants could improve. In the past few years, we improved the support of researchers writing proposals. This has already resulted in higher success rates for personal grants. For large collaborative grants we noticed that the success rate was satisfactory, but the number of applications was relatively low. To improve this, we will

specifically support young researchers in developing (European) networks so that they will be prepared for future calls.

12. Organize a long-term risk analysis of the COVID pandemic.

The UMCG has addressed the direct effects of the pandemic on research and researchers in several ways, for instance by extending temporary contracts and other support for early career researchers. It was also addressed in the yearly wellbeing survey among employees. This evaluation will be extended to a long term analysis.

PhD-policy and training

13. Empower the Graduate School: its leadership is very knowledgeable and progressive.

We would like to thank the committee for the compliment. We agree with the committee that the GSMS can be an important player in the envisioned cultural change to see the PhD trajectory as a period in which PhDs need to develop their skills as independent researchers rather than their productivity in producing refereed papers. To accomplish this, empowerment of the Graduate School is necessary and the best way to do so is currently discussed between the Graduate School and the board of the faculty. The results of this discussion are expected by the end of the year.

14. Make repeated training for supervisory roles mandatory to facilitate more effective doctoral supervision.

The GSMS agrees with the committee that mandatory repeated training for supervisors is important and we will install a steering committee with the assignment to design such training programme. Especially when making repeated training mandatory (e.g. by e-learning modules), it is important to make sure to address the most important questions and issues of experienced supervisors. Therefore, next to the compulsory basic supervision training, we will expand the current training program for experienced supervisors in a way that they can choose from several workshops in order to expand their knowledge and skills they feel they need to improve on. Thus, we will offer the opportunity to have a more personalized approach instead of a -one-size-fits all approach (i.e. an approach with a repeated similar course for everyone), which seems to be important given the variety in backgrounds and skills of the supervisors.

15. Implement at short notice the plan to establish formal mentorship programmes for PhD students. Add the PhD students' mentor to the Student Advisory Committee.

We do already have a formal mentorship programme in place for a long time. This is integrated in the obligatory course *Managing your PhD* for 'regular' PhD students (VSNU type 1&2). Here, each PhD student is linked to his/her mentor and the student has the possibility to contact the mentor outside the scheduled hours and can invite the mentor during Result and Development meetings with the student's advisory committee. The latter is not mandatory. For non-regular PhD students (VSNU type 3&4), this course is not obligatory, yet many of these students do participate in this course.

In agreement with the comment of the committee, the UMCG will also add an independent advisor to the student's advisory PhD committee. This will become mandatory for all PhD students as per January 1st, 2023. The role of the independent advisor is to provide advice to the PhD supervising team and PhD student

concerning the PhD trajectory. The minimum contribution of the independent supervisor is to be present during the Result & Development meetings held 6 months after the start and a year before completion of the PhD project. We anticipate that the addition of an independent supervisor to the student advisory committee will positively influence the quality and duration of PhD trajectories. Currently, several research groups in the UMCG are already working with this model and will share their experiences in order to have it successfully implemented in the whole of the UMCG.

16. Install formalized supervisory team meetings (guided by and organized by the Graduate School) at set periods every year, so that every student is treated in the same way.

The supervisory team is responsible for supervision and monitoring of the progress of PhD students. At 6 months, 9 months, 2 years, 3 years and when needed 4 years (based on a full-time 4-year contract) a Result and Development meeting is scheduled for each PhD student. A reminder to organize these formal meetings is sent to the PhD student and his/her supervising team by the GSMS via our registration system Hora Finita. During these meetings the PhD student and supervising team are asked to fill in a special Result and Development form, which includes questions about updates with regard to the training and supervision plan (TSP). Thus, although we do not formally update the TSP itself, updates of the TSP are part of the formal Result and Development meetings. All students are treated in the same way. More than 80% of our PhD students indicated in the RuG PhD student survey 2021 to have Result & Development meetings at the set periods given by the Graduate School.

We strive to further increase the number of PhD students that have Result and Development meetings as we believe this may have a positive outcome on the duration of PhD trajectories and wellbeing of PhD students. To this end, we will continue to stress the importance of these meetings in workshops/trainings for PhD students and their supervisors.

The GSMS will also more closely monitor the progression of PhD students via the registration system Hora Finita with the aim to identify PhD students that need help/advice and to approach them in a more personalized way. Furthermore, the addition of an independent advisor to the student's advisory committee might also aid in this.

17. Separate selecting a PhD candidate from formally allowing them into the Graduate School: the formal entry in the Graduate School can be used as a control point for the formal requirements to be a supervisor.

This is an interesting thought and we will explore this option in parallel with the design of the training programme for supervisors.

18. Communicate more clearly and repeatedly to PhD students what procedures they can follow or who they can turn to in case of a conflict with their supervisor (mentor, 'trust person', ombud).

At this moment the GSMS has communicated detailed information about the PhD confidential advisor / study counselor through our internal webpage, monthly newsletter (blog from the PhD confidential advisor / study counselor) and introductory meetings for new PhD students. In the information provided, we have made clear to whom to turn to, based on which type of questions/problems emerge. We do hope that this also lowers the barrier to seek support and help. We will extend the provision of this information by adding information to the 'welcome' packages the PhD students receive from the GSMS by regular mail. Furthermore, we will repeat the communication about the procedure and the PhD confidential advisor / study counselor during the Managing your PhD course. An option that will be considered by the committee

which will work out the advice of the SEP committee is to have 'low-threshold' advisors in the close environment of the PhD students to whom they may turn, so that things come in the open before they escalate.

19. Continue to explore policy development around PhD employment and contract status that takes into account the rich diversity of backgrounds and qualifications of this community.

As highlighted in the review report, it was decided in 2020 to only allow PhD students to work as employees (with the exception of international students who bring their own scholarship). Yet, the committee raises an important point and we will continue to monitor the background of PhD students in order to keep the rich diversity of students we have today.

Other special aspects

20. Improve the infrastructure to inform researchers on public-private partnerships.

As part of the communication strategy of the UMCG Innovation Center a website and others means of communication will be used to improve the information flow.

21. Develop citizen science initiatives.

There are already good examples of patient participation and citizen science in the UMCG, and they will certainly keep our full attention. We will extend our actions on these themes and bring them up in the research policies of the institutes and in leadership courses.

22. Make integrity training mandatory for all research staff.

In addition to the obligatory training for PhD students 'Scientific Integrity' and the research code 2023 that is under development, the UMCG will develop an e-learning module 'Scientific Integrity'. This module will be connected to our Learning Management System, which allows us to centrally administrate who completed the course successfully. The module will be strongly recommended for all researchers and research support staff and will be obligatory for all new employees and all employees who are up for promotion. Of course the e-learning module is accessible for all UMCG researchers. The PhD students will be exempted from the e-learning, because for them the Scientific Integrity course, mentioned above is obligatory.

In addition to the e-learning module, an intervision workshop will be developed, in which researchers can discuss integrity issues. This workshop will be regularly offered to all researchers and can be taken by individual researchers, but also by research groups, programmes, research institutes or departments. The workshops will be organized in collaboration with one of the persons of trust in scientific integrity and the institutes, programmes, research groups/departments themselves.

23. Develop a more transparent approach to documenting and communicating integrity cases.

In the UMCG researchers are supported by two persons of trust for scientific research. In addition, there is a PhD counselor that can function as ombudsperson and person of trust for PhD students and can advise them.

These persons of trust report yearly to the board of the UMCG with the same way of working as for the Decentral and Central Incident Report Committee.

A summary of the number of researchers that successfully completed the e-learning module, the type of reports with the above-mentioned persons of trust and connected statistics will be part of the annual report of the UMCG

24. Consider organizing a network of 'trust persons', e.g. a network of academics within each Institute who have formally identified roles in Integrity and who then work together as a network across the Institutes, and with relevant sections of HR and policy.

The recommendation is clear. However, as a reaction to the results of the Employee Wellbeing survey, a project group recently started to give advice on how to improve social safety, documents on the topic, route and the structure of the social safety support. Given the nature of some of the issues around social safety and integrity, we will provide low threshold access, but also professional support. We will pass the recommendation to the project group and wait for their advice.

25. Work towards a broader interpretation and understanding of what the term diversity means, and develop supportive policies.

The UMCG will take into account a variety of diversity markers, other than gender, such as background, nationality, ethnicity, socioeconomic status through collecting indicators (e.g. anonymous surveys, according to the GDPR). A SMART diversity policy will be developed to create an inclusive organization expanding the gender equality plan already in place, which will focus on three aspects: awareness, social safety and inclusion. Some of the activities will include: seminars, workshops, inclusive recruitment guide and training, communication outlets to increase awareness. These activities will be supported by the Diversity and Inclusion ambassador and working groups.

The UMCG will adopt the recommendation and we will develop it further by means of communication and trainings on the theme of D&I. This year we will start D&I seminars and an infographic to inform the organization.