

UMC Utrecht

response to assessment report from SEP research evaluation

(2013-2018)

This document contains the UMC Utrecht response to the Research Assessment 2013-2018. Chapter 1 details the response to recommendations regarding the UMC Utrecht as a whole. In chapter 2 all six strategic research programs respond to their specific recommendations.

1. UMC Utrecht response to SEP assessment report

1.1 Position of the executive board in relation to the SEP report

The executive board of UMC Utrecht has read and discussed the SEP report 2019. The SEP report is based on a self-evaluation report and a three-day site visit of the 13 member review panel, chaired by prof. René van Lier and supported by secretaries from the agency Quality Assurance Netherlands Universities (QANU). The SEP report also incorporated the main recommendations from a report of the (12 member) societal stakeholder committee, that complemented the expert review panel.

In this “position”, the executive board will respond to the recommendations included in the SEP report. The text is structured around the prioritized and grouped recommendations, as interpreted by the UMC Utrecht after careful reading of the SEP report. This not necessarily matches the order of the recommendations in the report.

Two recommendations take center stage according to UMC Utrecht: research governance between divisions and strategic programs (‘speerpunten’) and talent & career policy.

In summary, in response to the SEP evaluation, UMC Utrecht will on one hand focus on several general issues (paragraph 1.2-1.8), notably talent programs; collaboration at Utrecht Science Park; and the identification of clinical scientists, and on the other hand work on issues specific to the strategic programs (chapter 2).

1.2 Research governance

The UMC Utrecht agrees that the current matrix including 6 strategic programs and 10 divisions—with strategic direction of research to be determined by the strategic programs and financial decisions and decisions about research personnel mainly made by divisions – could be improved further. Although we are convinced that our research benefited considerably from the creation of “transdivisional” strategic programs some 10 years ago (a view shared by the SEP committee in their report), we agree that there always will be some tension in a matrix organisation, and we share the recommendation of the SEP committee that the strategic programs need to be able to influence decision-making more than in the current situation. The UMC Utrecht recognizes the risk identified by the SEP committee that in an organisation with three missions (i.e. research, education and care), which is experiencing financial pressure, decisions can be increasingly informed by “operational” care-related (the largest of the three tasks in terms of personnel and finance) considerations.

The way forward, according to the executive board, consists of several interlocking changes. We are improving alignment in decision making between divisions and strategic programs by reinforcing the role of the manager research of each division and by ensuring that the managers research and strategic program leaders will meet regularly to discuss strategic issues relevant to the research portfolio. We are also in the process of expanding the influence of the strategic programs, allowing them to more effectively and strategically shape research, healthcare and education of UMC Utrecht. For example, the strategic programs were in the lead in proposing which research topics will be prioritized in the UMC Utrecht 5-year strategy for the years 2021-2025 and will also monitor and guide the implementation of these topics in the upcoming years, including the allocated budget. This comes on top of already instigated changes in hiring and promotion policies. Research programs are increasingly in the lead in proposing or greenlighting promotions, most notably in creating (associate) professorships and in identifying individual researchers for tenured tracks or individual funding opportunities. All in all, this will change the dynamic in research-related decisions, with research programs becoming more and more in the lead, while (almost) all research activities of the divisions have to be incorporated in the strategic programs; the latter also being a key performance indicator of the monthly discussions with the leadership team of UMC Utrecht. With these changes we believe we are addressing the implicit concern by the SEP committee about “academic leadership” as a cornerstone of a UMC. It also partly “ringfences” funds for research, in line with another recommendation.

1.3 Talent & career policy

The other main point raised by the SEP committee is the current absence of a UMC wide talent and career policy. All UMC wide (“general”) programs were indeed temporarily stopped some time ago awaiting a new talent policy, albeit that some much-appreciated talent programs continued in certain divisions and strategic programs. The executive board recognizes that a central talent program is now urgently needed. That is why a budget reservation for a new talent program has already been made, while the talent program is in latest stage of development.

The recommendation about the talent program is closely related to recommendations about dedicated research time for clinician scientists and the definition of “principal investigators”. In their 2020 management contracts, all 10 UMC Utrecht divisions included the task to identify all tentative clinician scientists, in collaboration with the strategic programs. Currently the identification of clinical scientists is ongoing and will be monitored. The pros and cons and definition of PIs are still under debate at UMC Utrecht.

1.4 Research support

About “innovation and grant” support, including technology transfer, the SEP committee remarks that these important tasks have not been included in one well-functioning integrated office. According to the review committee the UMC Utrecht should consider creating an ‘accessible integrated central support office’. The foundations are very much in place, recognizes the committee, as all vital support elements are present in the UMC Utrecht.

The need for streamlining and integrating support functions is well recognized and this change is already underway. In the first phase there will be a physical integration of the different research support front ends. This will create impetus for further integration. Related discussions about support capacity are ongoing. These are in line with the recommendation that also more coordination is needed for personal and research infrastructural grant support.

1.5 Stakeholder committee

The recommendations of the societal stakeholder committee to develop a clear central policy for patient and public involvement and the need for researchers to learn from each other in this domain are well taken. They are very much addressed by the central ‘Patient and public involvement’ program, that was initiated at the end of 2018 at UMC Utrecht and of which the results were not captured by the SEP self-evaluation report 2013-2018.

To define the societal value of research and to determine objectives and related activities in that field was in the current evaluation subsidiarily asked to the strategic research programs and the research themes within them. Societal value was not explicitly defined for the UMC Utrecht as a whole, but the self-evaluation report had all research lines describe their mission and related activities, with many suggested indicators capturing ‘societal impact’.

1.6 Collaborations

UMC Utrecht is intensifying and structuring the collaboration with Utrecht University. The executive board specifically aims to improve the coherence and increase the intensity of research collaborations at the Utrecht Science Park. The latter being specifically suggested in the SEP report in view of the (inter)nationally unique combination of (life science) institutions and companies located there. In addition, the Alliance with the Technical University Eindhoven, Wageningen University&Research and Utrecht University is crucial in optimising the impact of our research.

1.7 Data science

Efforts are underway to structure and harmonize data science across the UMC Utrecht, in close collaboration with data science / artificial intelligence groups at Utrecht University and within the other two partners (Technical University Eindhoven and Wageningen University & Research) of the Eindhoven/Wageningen/Utrecht alliance. In addition, an eHealth department, where applied data science plays a crucial role, was instigated in the fall of 2019 at UMC Utrecht.

1.8 Open Science

The UMC Utrecht Open Science approach to research evaluation, where mission-related narrative-based information is central and that de-emphasizes bibliometric indicators, stirred debate. The SEP committee recommended to consult the staff and broaden the support base with respect to specifics and the impact the new science evaluation approach has on research areas and individual researchers.

It is worth noting here that two weeks after the site visit, the combined Dutch universities, university medical centers and national research funders presented the position paper 'Room for everyone's talent', outlining an approach to research evaluation that resonated very much with the UMC Utrecht method. Also, the Dutch Standard Evaluation Protocol (SEP) itself is under revision. The new version, effective in 2021, will have a strong emphasis on Open Science activities and less emphasis on bibliometric indicators.

UMC Utrecht indeed feels that much work needs to be done in translating these developments into tangible career guidance, for example in evaluation criteria for postdocs and assistant professors. This will be part of the talent & career program. Translation into criteria for (associate) professors in portfolio requirements had already been initiated, while similar developments for PhD students are underway. At the same time, we feel strongly supported by the shift in Dutch academia towards new academic incentives and rewards.

2. Responses of the six strategic research programs

2.1 Brain / UMC Utrecht Brain Center

The UMC Utrecht Brain Center is delighted about the positive feedback of the evaluation committee. In line with the evaluation report, the Brain Center will in the coming years focus on the following themes: implementation of clinical scientists; career development; societal relevance; organisational structure of the center; and integration of neuroscience research facilities/labs. Our clinical scientists are of great importance and bridge clinic and fundamental research. Dedicated research time is a prerequisite for excellent clinical research and for bench-to-bedside research. To assist in career development, the Brain Center aims to facilitate a tenure track program, to continue its fellowship program, and start a mentoring program for grant- and career support. To increase the societal relevance of our output, we will invest in the role of patients and regional partners in each of our clinical and experimental focus areas. The governance and structure of the Brain Center will be further clarified through the design of a new organisational matrix. Additionally, we will implement a more detailed yearly evaluation of our clinical and experimental focus areas, organize specific in-depth research meetings, and (re)define research strategies for newly formed or restructured clinical focus areas: precision psychiatry, neuro-oncology, and developmental disorders. Finally, we will integrate our core research facilities and neuroscience laboratories and realize an overarching translational neuroscience laboratory (LTN) within the Brain Center. These goals will allow us to maintain our research efforts at the highest level, while at the same time stimulate personal development, innovation and valorisation, and interdisciplinary research.

2.2 Cancer

The strategic program Cancer is responsible for the strategic framework of all cancer research and the coordination of its implementation. The SEP committee concluded that the research quality, relevance to society and viability of the program is very good.

It was recommended that we continue to develop and implement our newly chosen strategy. This will be addressed by a further specification of our focus and measures, which has to be reinforced by provisions to stimulate concomitant promising and innovative research projects. Another important condition that should be addressed is an excellent data management infrastructure, which has to be organized on a central UMC Utrecht level with dynamic input by the strategic program Cancer. The next recommendation refers to the fostering, during the various stages of their career, of our talents that are working within the Cancer Program involved disciplines. This includes an implementation plan for clinical scientists which has recently been developed and should be effective within the coming years. In addition, an OncoCareerBoard, led by 10 young postdoc/assistant professors, has been installed with the aim to identify and address the issues that this specific group is faced with during their career. Last but not least, regular discussions on our societal impact will be organized by the founding of an official stakeholder committee. Patients and other stakeholders will support the program in their aim to keep societal needs as one of the drivers of research innovation and its subsequent implementation.

2.3 Child Health

The Child Health core team is very grateful to the SEP members for their thorough evaluation of the Child Health research program. The findings they have described are recognized and acknowledged. The SEP report was discussed extensively by the core team and in a meeting with all Child Health PIs. Each research line and each theme will formulate a short plan for the coming 5 years, and these plans will be part of the overall Child Health strategy for 2020-2025. This strategic plan will be aligned with the new 2021-2025 strategy of UMC Utrecht, which will help to resolve several issues raised by the SEP-committee. Furthermore collaborations with the Utrecht University strategic theme Dynamics of Youth will be intensified.

We acknowledge the importance for investigators in Child Health to identify with the name of the Program. However, the name Child Health is already a strong brand for the UMC Utrecht and broadening the name raised a lot of divergent opinions. We decided to stick to the name Child Health and to use the subtitle 'Science for Life' more prominently. This subtitle adequately covers research from conception to adulthood and embraces the broad environment (mother, family, society) of the child.

Public health in the Child Health program is translated in how a diseased child is influenced by his entire environment (family, society, exposome) and how this environment influences (or even creates) diseases. To better develop the three disease overarching themes in the Program (including physical vs mental health) we will provide the themes with a leadership theme, which is responsible for the connections within and outside the program and which can also strongly propagate the themes.

The Child Health core team organizes a biannual review ('vlootschouw') of all PIs and conducts annual coaching interviews with all researchers. The criteria and the findings are recorded in writing and are also communicated orally. The program will continue to do this and will professionalize further in some areas.

We agree that the translation of life-cycle research into life-cycle care is not equally realized in all disease areas. In the upcoming period it will be a priority to enforce life-cycle care in the entire UMC Utrecht.

In the program we will further focus on 'social value for rare diseases'. There are many unmet physical, mental and social needs for children with rare diseases. Within the Utrecht Science Park we have an excellent track record and great opportunities to create value with regard to diagnosis and treatment of severe pediatric diseases, which are often divers and rare. Nevertheless, these diseases create a huge burden on patients, families and society and the program has the ambition to push the borders in all these fields. In this regard, clinical trials are indeed important tools, which will be supported by the U-trial infrastructure at UMC Utrecht.

2.4 Circulatory Health

The strategic program Circulatory Health is very grateful to the committee members for the open minded feedback and insights with important recommendations to enhance the strategic program. Thanks to their recommendations Circulatory Health will bring focus - in collaboration with the other strategic programs and the central organizational bodies of UMC Utrecht – on the following topics for further development towards a world-leading Circulatory Health program:

1. Expand the societal impact of the chosen patient groups areas;
2. Guarantee dedicated research time for clinical scientist;
3. Develop a clear career plan for (young) researchers and clinicians;
4. Stimulate interaction and networking between divisions and groups, from PhD level to professors;
5. Execute the Laboratory for Circulatory Health;
6. Create of a central core facility for data science;
7. Initiate clinical trials with patient involvement.

The recommendations of the stakeholder committee made clear that it's a must to enhance the valorization process to be more successful with Public-Private Partnerships (PPP). We'll further explore activities and improvements of societal value and patient involvement.

In conclusion the strategic program Circulatory Health is ambitious to (inter)nationally reduce the burden of cardiovascular disease through care, research and education. Ownership and commitment from the Circulatory Health PI's (professors and associate professors), senior staff and young talents together with a good UMC Utrecht infrastructure enable us to work in a high quality academic setting and with multidisciplinary collaborations. Those elements are essential to be successful in achieving our goals and creating more societal impact each year.

2.5 Infection & Immunity

The Strategic Program Infection & Immunity is responsible for the research strategy in the field of inflammatory and infectious diseases and immune-mediated therapy. The SEP committee concluded that the research quality, relevance to society and viability of the program are very good to excellent.

The committee recommended more direct financial control to the Strategic Program, which has been addressed jointly by all Strategic Programs through proposal of a new financial empowerment model at UMC Utrecht.

It was proposed that we develop a support system for clinician-scientists and concomitantly maintain sufficient attention for fundamental research. This has meanwhile been addressed by establishing a clinical scientist profile by all Strategic Programs jointly, which will be executed together with the divisions. Additionally, this has been addressed in the 2020 management contracts of all division at UMC Utrecht and this will continue during 2021. Within Infection & Immunity we already actively support direct collaborations of all researchers with clinicians. We will continue to develop and implement our research strategy within the four themes in the program which were supported by the committee.

The next recommendation refers to the need to develop a strategic vision of the future technologies. This will be supported by co-developing 'Strategic Program laboratories' modeled to the arrangements already developed and implemented for the Center for Translational Immunology within the strategic program Infection & Immunity. We will make an overview of facility needs. Current emphasis is on bioinformatics infrastructure, a vaccine platform and an immunology platform.

Last but not least, regular discussions on developing and strengthening international links also outside Europe will be organized during PI research meetings and support will be provided by a grant writer to fuel collaborations in international consortia.

2.6 Regenerative Medicine and Stem Cells

The Regenerative Medicine and Stem Cells program aims to improve the understanding of stem cell biology and disease, to develop innovative technologies, and to translate the findings into novel regenerative therapies. The SEP committee rated research quality as 'excellent' and both relevance to society and viability as 'very good'. The most important recommendation from the SEP committee centered around technology platforms. Induced Pluri-potent Stem cell (iPS) technology is already widely used within the UMC Utrecht, thereby having several groups actively making these cell products and their derivatives for preclinical use and drug testing. However, currently these activities are still too fragmented and no UMC Utrecht-broad facility has been established, including clear links towards clinical implementation. In the near future, the RMSC research program will bundle the iPS knowledge within the UMC Utrecht, make the necessary investments towards clinical implementation, and link them to both national and international initiatives.

Extracellular vesicles (EV), including exosomes and other vesicle derivatives, is a well-developed, international-leading, and active research area within the Utrecht Science Park. This encompasses both basic science, therapeutic developments and clinical diagnostics. However, the branding within the UMC Utrecht and UU of this topic needs further maturation. In the near future, we will bundle EV technologies within the UMC Utrecht and UU, and make them recognizable and available for the Utrecht community and our partners with the Eindhoven-Wageningen-Utrecht Alliance.

The evaluation committee also suggested to revise guidelines regarding spin-out companies and equity limitations. Although the executive board recognizes some of the issues raised, the current UMC Utrecht guideline is the product of a complex balancing of interests and is not in need of immediate revision. The guideline is also broadly in line with those of other Dutch research institutions, although significant differences exist.

Visiting address

Heidelberglaan 100
3584 CX Utrecht

P.O. Box

P.O. Box 85500
3508 GA Utrecht

www.umcutrecht.nl

t +31 (0)88 75 555 55

