

Report of the External Evaluation Committee of the EMGO⁺ Institute for Health and Care Research

according to the Standard Evaluation Protocol (SEP) 2009-2015

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Part 1. General

1.1. The Standard Evaluation Protocol (SEP) 2009-2015

For the purpose of the external evaluation of the EMGO⁺ Institute, the Standard Evaluation Protocol (2009-2015) was applied.

The SEP 2009-2015 has two objectives with regard to the evaluation of research and research management:

- Improvement of research quality based on an external peer review, including scientific and societal relevance of research, research policy and research management.
- Maintenance of accountability to the board of the research organisation, and towards funding agencies, government and society at large.

The objective of improvement is aimed at both the research and its management. External evaluations are of great value to the institute and its researchers, since international experts in the field formulate recommendations regarding the research, including the strategy and policies which direct and provide the conditions for the conduct of research.

The SEP is primarily directed toward the evaluation of scientific research. However, the scope of the term 'research' is not limited to the research results. Research management, research policy, research facilities, PhD-training and the societal relevance of research are considered integral parts of the quality of work in an institute and its programmes.

Furthermore, the conduct of research is by definition an international undertaking. Nearly all fields of research are characterised by an intensive international exchange of ideas and people. The main partners and competitors of the institutes which will be evaluated might be found, not only within the national context, but also in the international arena.

The objectives of accountability and improvement are served by both a retrospective and a prospective evaluation. Both the assessment of past results and recommendations for future research, research management and research policy are of great importance to the research organisation, its researchers and management. Both the retrospective and prospective characters are reflected in the assessment criteria.

1.2. Evaluation criteria, focus of the assessment and rating

The Standard Evaluation Protocol (SEP) entails three main characteristics:

- Two levels of assessment: The assessment takes place at two levels: (1) the EMGO⁺ Institute and (2) the level of research programmes, i.e. Lifestyle, Overweight and Diabetes (LOD), Mental Health (MH), Quality of Care (QoC), and Musculoskeletal Health (MSH).
- Three vital tasks: The assessment regards the three vital tasks of the EMGO⁺ Institute, i.e. producing results for the academic community, producing results that are relevant for society, and educating and training the next generation of researchers.

- Four main criteria: The assessment entails four main criteria, i.e. quality, productivity, relevance, and vitality & feasibility.

The evaluation report consists of two main parts:

- Assessment of the institute level in terms of the four criteria, with a focus on policy and strategy, identifying the main issues of praise and criticism and putting forward recommendations for improvement. The accent here is on looking forward.
- Assessment of the research programmes according to the four criteria, with a focus on performance, both in terms of scientific achievements and of societal relevance. The committee may use qualitative and quantitative indicators and indications. In a summary for each of the research programmes the four main criteria are translated into a five-point scale: Excellent / Very good / Good / Satisfactory / Unsatisfactory.

1.3. The Members of the External Evaluation Committee (EEC)

The EEC consisted of the following members:

- Prof. Harry Rooijmans, emeritus professor of Psychiatry and a member of the 2004 evaluation committee (chair), The Netherlands
- Prof. Jozien Bensing, professor of Health Psychology and former director of the Netherlands Institute for Health Services Research (Nivel), The Netherlands
- Prof. Cyrus Cooper, professor of Rheumatology and director of the MRC Epidemiology Resource Centre, Southampton, United Kingdom
- Prof. Peter Croft, professor in 'Primary Care Epidemiology', Keele University, United Kingdom
- Dr. Simon Griffin, assistant director of the MRC Epidemiology Unit and group leader for the prevention programme, General Practitioner Cambridge University, United Kingdom

Secretary of the EEC:

- Dr. Amika Singh, scientific project manager, VU University Medical Center, Divisiebureau Divisie VI, The Netherlands.

1.4. Preparation of the site visit

Four weeks prior to the site visit, the members of the external evaluation committee (EEC) received the following documents:

1. The self-evaluation report of EMGO⁺, including 15 Annexes with further background information:

- Annex 1: Recommendations of the 2004 external evaluation committee and actions undertaken by the institute based on these recommendations
- Annex 2: Sources of external funding per research programme 2004-2009
- Annex 3: Important research infrastructure 2009

- Annex 4: Trend citation analysis of the EMGO⁺ research programmes up to 2008, conducted by the Center for science and technology studies, CWTS
- Annex 5: EMGO⁺ specific citation analysis
- Annex 6: Academic collaborative centers, joint research centers and national collaborations
- Annex 7: EMGO⁺ endowed chairs
- Annex 8: Ongoing international collaboration
- Annex 9: Top 10 citations
- Annex 10: Publication list 2004-2009, per year, per research programme
- Annex 11: International research funding 2004-2009, excluding industry funding
- Annex 12: Personal awards and prizes 2004-2009
- Annex 13: Overview of output indicators of societal relevance
- Annex 14: New Professors appointed at EMGO⁽⁺⁾ 2004-2009
- Annex 15: EMGO⁺ policy plan

2. A USB-stick with

- Standard Evaluation Protocol
- The 2004 external evaluation report and management letter
- The institute's annual reports 2004-2009
- The project plan that formed the basis for the formation of EMGO⁺.

1.5. Procedures of the external evaluation committee

The assessments as provided in this report are based on the materials as provided by the EMGO⁺ Institute (see 1.4.) and the interviews held during the site visit (22nd/23rd November 2010). The programme of the site visit is attached as an appendix to this report (appendix 2).

Prior to the site visit

The members of the EEC all read the materials provided by the EMGO⁺ Institute (see 1.4). Before the site visit, the members discussed which two members of the EEC would be responsible for each of the four research programmes.

- Lifestyle, Overweight and Diabetes: Dr. Simon Griffin, Prof. Peter Croft
- Mental Health: Prof. Harry Rooijmans, Prof. Peter Croft
- Quality of Care: Prof. Jozien Bensing, Prof. Peter Croft
- Musculoskeletal Health: Prof. Cyrus Cooper, Prof. Peter Croft

All members provided their preliminary assessment of the institute and the respective research programme in writing to the chair of the EEC. Before the official start of the site visit, the members of the EEC discussed procedural matters and responsibilities during an informal meeting.

Site visit

Besides the research programmes, the infrastructure of the EMGO⁺ Institute was presented by several committees. This was taken into account, when assessing the overall institute. After each session, the members of the EEC shortly discussed the interview and their opinion. Based on these considerations, the preliminary findings were discussed in a broader perspective during a closed meeting at the end of each of the two days of the site visit.

After the site visit

A draft version of the report was sent to the EMGO⁺ Institute in January 2011 for factual corrections and comments. Taking into account these comments, the members of the EEC delivered the final draft of the report. Finally, the report was submitted to the Board of the VU University medical center and the Executive Board of the Vrije Universiteit.

Part 2. Assessment at the level of the institute

2.1. Brief description of the institute, its mission and objectives, and its research activities

Brief description of the EMGO⁺ Institute

The former EMGO ('ExtraMuraal Geneeskundig Onderzoek', i.e. Dutch for Extramural Medical Research) Institute was transformed at 1-1-2009 into the EMGO Institute for Health and Care Research (EMGO⁺). EMGO⁺ is one of the five research institutes led and coordinated by the VU University Medical Center (VUmc). The EMGO Institute was established in 1987. EMGO/EMGO⁺ was and is directly linked and tailored to one of VUmc's priority areas: i.e. extramural medical research and practice.

The EMGO Institute was last externally evaluated six years ago (2004). Next to the actual evaluation, the report also included a so-called management letter with recommendations made by the committee. Based on these recommendations, since 2004 the focus of EMGO has broadened and EMGO's formal focus now also includes research related to 'transmural' care and prevention, i.e. research to improve the continuity of health care and prevention between hospital and extramural settings.

Recently, but within the present 2004-2009 evaluation period, EMGO has initiated and started to implement a major change. From its start, EMGO was a research institute within the medical faculty of the VU University Medical Center (VUmc). However, the current major challenges in prevention and health care covering the translational chain from molecule to human to society require interdisciplinary collaboration and multidisciplinary expertise. Research to improve the evidence base for and innovation of trans and extramural prevention and care is thus dependent on various scientific disciplines and on collaboration between these disciplines, involving medical researchers, epidemiologists and other health scientists, social and behavioural scientists, human movement and nutrition scientists, and for specific studies in these fields legal, ethical, and economic expertise is also a major requirement. All these disciplines and expertise are available at different faculties on the VU and VUmc campus. Different research groups, especially researchers from the department of Clinical Psychology of the faculty of Psychology & Education, and the department of Health Sciences of the faculty of Earth & Life Sciences had joined the EMGO Institute in the course of the last 10 years to improve the necessary interdisciplinary collaboration. However, this collaboration was lacking a formal status and was in need of further extensions. This evolution has now recently led to an important formal change for the Institute on January 1 2009. On that date EMGO officially became a so-called interfaculty research institute. The name of this new institute is the "EMGO Institute for Health and Care Research" (EMGO⁺).

The creation of formal Interfaculty Research Institutes was and is a joined ambition of the VU and VUmc. Hence the establishment of an interfaculty research institute for health and care research was strongly supported and endorsed by the boards of both organizations, and by the deans of the participating faculties. As an interfaculty research institute EMGO⁺ aims to further improve the research focus on the VU/VUmc campus, by improved collaboration and coordination, acquisition, and quality control to ensure ongoing high quality scientific output and societal research relevance.

EMGO⁺ now comprises research from various departments of VUmc, and the faculties of Psychology & Education and of Earth & Life Sciences. This formation of EMGO⁺ has led to a further evolution of the institute's mission and goals, a change in organization, a renaming of the institute's research programmes, and a further growth in the institute's input and output. EMGO⁺ has organized and focused its research in four research programmes, i.e., Lifestyle, Overweight and Diabetes; Mental Health; Quality of Care; Musculoskeletal Health. In 2009 approximately 150 research projects were embedded within the four research programmes. The vast majority of these projects as well as a majority of the EMGO⁺ researchers is supported by external funding. Important external funding sources are research funding grants from the Netherlands Organization for Health Research and Development ('ZonMW') and the Netherlands Organization for Scientific Research ('NWO'), i.e. the two research grant agencies responsible for distribution of governmental budgets for scientific research, and contract funding grants from the main charities for diabetes, heart disease, and cancer research. In recent years, international external funding is of growing importance, with grants from the US National Institutes of Health, the European Commission and the World Cancer Research Fund.

Mission of the EMGO⁺ Institute

The EMGO⁺ mission is to encourage, initiate, conduct and publish excellent research of international standing to improve public and occupational health, primary care, rehabilitation and long-term care.

Objectives of the EMGO⁺ Institute

By fulfilling its mission EMGO⁺ is aiming to contribute to improving evidence-based

- public and occupational health;
- primary health care;
- mental health care;
- rehabilitation practice;
- long-term health and health care.

In these fields the institute aims to contribute to

- strengthening the evidence-base for current ongoing practices;
- innovation of practice;
- innovation of relevant research methodology;
- provide input and direction for education and training for researchers and practitioners.

The aim of the EMGO⁺ Institute is to perform translational and trans-disciplinary research of both high scientific quality and societal relevance. Research projects carried out at EMGO⁺ mainly have health outcomes or determinants of health as primary endpoints of interest. The research is embedded in four research programmes that link to the main burdens of disease in the Netherlands, as well as internationally:

1. Lifestyle, Overweight and Diabetes (LOD)
2. Mental Health (MH)
3. Quality of Care (QoC)
4. Musculoskeletal Health (MSH)

EMGO⁺ focuses on applied and strategic research involving issues that are relevant for public and occupational health, mental health, primary care, rehabilitation, and long-term care. Many studies are either executed within large population-based cohorts or in public health and extramural medical practice settings, such as general practices, nursing homes, specialized mental health care organizations, homes for the elderly, schools, worksites, occupational health care settings and outpatient services. These latter studies are often conducted within so-called academic collaborative centers, i.e. formal collaborations between EMGO⁺ and the practice settings to conduct practice-based research of strong methodological rigor, in order to promote and enable evidence-based practice. Such studies include observational research and intervention studies.

2.2 Overall assessment of the EMGO⁺ Institute

General

According to the self evaluation documents and the site visits, the unanimous view of the EEC is that EMGO⁺ is an outstanding research institute. In terms of the volume and quality of output, the number of completed PhD dissertations, the infrastructure and resources and their management, and the research income generated by the institute as a whole, the achievements of EMGO⁺ by the end of the assessment period have clearly been excellent on all counts as defined by the evaluation protocol, producing work of international quality and influence.

The EEC notes EMGO⁺'s careful response to the concerns of the 2004 evaluation panel, including demonstration of its capacity to change in response to challenges and threats, notably in the transition from EMGO to EMGO⁺ which among other things has achieved a strengthening of the research programme 'Mental Health' by successful integration of psychology into that programme. Also, the advice to further strengthen cooperation with academic collaborative centers was followed up. The potential for EMGO⁺ to continue to achieve against targets of internationally excellent influential research output is secure.

Quality

There are many signs of excellent leadership within the institute, as can be seen from the enthusiasm among researchers within the institute and the internal quality assurance procedures. An explicit example of good leadership is the extension from EMGO to EMGO⁺, thereby opening up new research fields and opportunities. As compared to the previous evaluation, the EEC notes a strong increase in external – especially international (European and Northern American) - funds.

The EEC is evaluating an interfaculty institute and not the university as a whole. Therefore, we cannot make any statements about distribution of resources within the university, but EMGO would be likely to benefit from a system of allocation which is based directly on performance

indicators such as the acquisition of external funds. This could prevent the development of a situation in which EMGO⁺ becomes the victim of its own success.

The EEC recognized EMGO⁺ as an excellent producer of PhDs – it seems hugely successful and impressive in its range and volume and training capacity. However, the organisational structure with regard to strategic decisions is diffuse, probably due to the university department/institute matrix and the nature of the research within EMGO⁺ being strongly influenced by the fact that 80% of the output is based on the work of the PhD-students. As the PhD-students reported to the EEC, they are satisfied by the infrastructure and supervision provided by the EMGO⁺. Given the importance of the PhD-students as a financial and intellectual driving force within EMGO⁺, the EEC wondered why the institute is not able to provide exact numbers for duration and trajectories of PhDs, completion rates and their subsequent career destinations. The EEC also wondered whether the high ratio of PhD-students to senior supervising staff might become inhibitory to the future innovative developments of the EMGO⁺. The relative numbers of senior staff and PhD-students are predetermined at a higher level. If EMGO⁺ were to have more of its own budget responsibility, it might have the possibility to change this. In the given structure this would seem to be more difficult.

Productivity and Relevance

The EEC is very impressed by both the quality and quantity of the research output of EMGO⁺ over the past six years, as indicated by the Crown indicators of the four research programmes. The EEC is well aware of the fact EMGO⁺ contributes in a substantial way to several aspects of societal relevance, as for instance clinical guidelines and NICE reviews. Indeed it would be fair to say that EMGO⁺ has supported substantially (by means of reviews and original research and direct involvement) to the development or the support for guidelines in fields such as back pain in many individual countries and across the European Union. However, the EEC has noticed that all programmes present their Crown indicator as the main indicator of the quality of their work. The EEC would welcome explicit strategy discussion on the relative importance attached to Crown-indicator and indicators of societal relevance and consideration of development markers of the latter.

Vitality and Feasibility

The EEC notes the robust research facilities (among others the impressive databases and quality assurance procedures) and expertise within the institute. However, the EEC recommends consideration be given to redressing the position of EMGO⁺ towards providing more time and support for innovative work by postdoctoral leaders in developing core themes.

We wondered whether the substantial number of PhD-students in comparison to the senior supervising staff referred to earlier might also be constraining development of research capacity cross-programme collaboration and innovative science at a more senior level. This may be a topic to be considered in the strategic decision-making committees of the university.

Again we sensed that if EMGO⁺ were to have more of its own budget responsibility they would have the tools to change this, whereas in the given structure this is difficult to resolve.

Overall score of the EMGO⁺ Institute	5
Quality	
- Leadership	5
- Academic reputation	5
- Organisation	5
- Resources	5
- PhD Training	5
Productivity	
- Productivity and strategy	5
- Productivity	5
Relevance	
- Societal relevance	5
Vitality and feasibility	
- Strategy	5
- SWOT analyses	5
- Robustness and stability	5

Five point scale used for assessment: 5 = excellent; 4 = very good; 3 = good; 2 = satisfactory; 1 = unsatisfactory.

Part 3. Assessment of the four research programmes

3.1. Lifestyle, Overweight and Diabetes (LOD)

3.1.1. Brief description of the research programme LOD

This research programme aims to contribute to curbing the overweight and obesity, and diabetes epidemics by identification of the primary lifestyle correlates and biological determinants, and by evaluation of efficient ways to improve lifestyle in the context of chronic disease management.

Human resources within LOD: On 31/12/2009, 13.35 fulltime-equivalent (FTE) tenured staff, 29.20 FTE non-tenured staff participated in the LOD research programme.

3.1.2. Overall assessment of the research programme LOD

Overall assessment programme 'Lifestyle, Overweight and Diabetes': 5 (excellent)

With regard to the number and quality of publications and PhDs, and the number of grants (including European Union and NIH funded projects) the programme has been hugely impressive. The outputs of the programme are highly cited and the programme has a high academic reputation internationally.

The EEC also noted that the programme had followed the recommendations made by the board of the previous evaluation committee (2004) concerning increasing the breadth of the research beyond the outputs from one important but relatively small (by international standards) cohort study.

However, the programme which has been in its current form since 2007 does appear to consist of two distinct parts, that is one focused on diabetes and one on wider aspects of the behaviours determining risk of obesity, diabetes and their complications. Whilst the title of the programme now encompasses lifestyle and diabetes, it was not clear that the undoubted internationally competitive expertise in these different fields is being combined synergistically to generate outputs that are greater than the sum of the parts. There are apparently plans for activities to address this acknowledged weakness. Many aspects of the research on health behaviours are innovative (original ideas, precise outcome assessment, relevant study samples and so on) and are likely to continue to be highly regarded. The work on improving the quality of care for people with diabetes will undoubtedly have high societal relevance (which is important), but given that it concerns models of care developed and evaluated several years ago by others it is not clear that generalisable scientific outputs from this work will match the international quality achieved in the recent past.

Data collected as part of existing cohorts has enabled productive international collaborations, but a strategic vision of how this programme is leading on the translation of previous

observations to more fundamental biological understanding or to novel preventive interventions, or both, was not evident. This challenge was posed by the previous evaluation committee in 2004.

The EEC noted clear but as yet not fully realised opportunities for collaboration with basic scientists and better integration of behavioural research. The EEC recommends a strengthening of the collaboration between the different parts of the programme, as well as with other programmes and utilisation of other well-characterised study populations, in parallel with some consideration of strategic direction. Against this background the EEC noticed that the leadership of this research programme (and also of other research programmes) is somewhat more focussed on research management with perhaps less attention to the longer term direction of its content. Given the productivity of the programme (research outputs and training) and the work involved in establishing and maintaining cohorts, this is entirely understandable, but it may mitigate against replication of the outstanding successes of the last seven years.

Overall score 'Lifestyle, Overweight and Diabetes'	5
Quality	
- Quality and scientific relevance of the research	5
- Leadership	5
- Academic reputation	5
- Organisation	4
- Resources	5
Productivity	
- Productivity and strategy	4
- Productivity	5
Relevance	
- Societal relevance	5
Vitality and feasibility	
- Strategy	4
- Robustness and stability	5

Five point scale used for assessment: 5 = excellent; 4 = very good; 3 = good; 2 = satisfactory; 1 = unsatisfactory.

3.2. Mental Health (MH)

3.2.1. Brief description of the research programme MH

The MH programme has as its mission to encourage, initiate, conduct and publish excellent research to increase the understanding of mental health. Furthermore, it aims to stimulate evidence-based mental health care and prevention, and thereby improve public health in general. In addition, the MH programme aims to contribute to the training of an excellent new generation of researchers and clinicians, ranging from bachelor and master students in psychology and medicine to PhDs and postdocs. Its main focus is on the most common mental disorders: depression, anxiety and developmental, disruptive disorders.

Human resources within MH: On 31/12/2009, 16.31 FTE tenured staff and 27 FTE non-tenured staff participated in the MH research programme.

3.2.2. Overall assessment of the research programme MH

Overall assessment programme 'Mental Health': 5 (excellent)

This is a very impressive and successful programme. The success is partly due to the inclusion of the research group of the Faculty of Psychology and Education. The quality and quantity of the scientific output is outstanding. The emphasis seems to be more on improving applied research than on fundamental work on basic science and its translation.

The EEC is aware of the fact that the programme is relatively young and that some plans for research on developmental themes are in a very early phase as yet. However, the EEC feels confident that the leadership is able to take the right decisions with regard to future research. The EEC noticed that it will be a challenge for the programme to develop more collaborative work with the field of neuroscience. Although the staff of MH has almost doubled during the last 2 years, the EEC is confident that the leadership will be able to shape the programme in an innovative and productive way.

The EEC was impressed by the enthusiasm and the clear strategic vision of the leaders of the programme. The self-evaluation report by this group showed a clear understanding of the important weaknesses and threats that the group faces, but in the context of an equally clear view of the strength and opportunities which they have.

Major strengths include (i) strong leadership; (ii) high impact "applied health" stories as evidenced by the "highlights" section of their self-evaluation, especially the secondary prevention work on stepped care and e-interventions; (iii) multidisciplinary collaborations with neuroscience, psychology, other clinical fields such as cancer, academic health centres (including patient groups), national mental health research networks; (iv) international collaborations and funding

Improvements to the programme which might usefully be considered include: (i) strengthen the content and aims of the basic science links and studies; (ii) clarify, develop and promote the "primary prevention" objectives and narrative related to the epidemiology programme –

the latter is scientifically strong but its purpose and content is currently characterised in descriptive terms rather than by practical public health research and policies for prevention;
 (iii) flexible development of main research topics.

Overall score 'Mental Health'	5
Quality	
- Quality and scientific relevance of the research	5
- Leadership	5
- Academic reputation	5
- Organisation	5
- Resources	5
Productivity	
- Productivity and strategy	5
- Productivity	5
Relevance	
- Societal relevance	5
Vitality and feasibility	
- Strategy	4
- Robustness and stability	5

Five point scale used for assessment: 5 = excellent; 4 = very good;
 3 = good; 2 = satisfactory; 1 = unsatisfactory.

3.3. Quality of Care (QoC)

3.3.1. Brief description of the research programme QoC

Research in this programme aims to contribute to improving the quality of care in all health care settings. The programme unites expertise on general topics relevant to quality of care, such as patient safety, health ethics and law, with expertise in quality issues regarding more specific areas, such as community genetics, elderly care and end-of-life care. The emphasis is on a view of chronic diseases as progressing through distinct phases: genetic predisposition, development of risk factors, onset of disease, early manifestation, progression, rehabilitation and the end of life.

Human resources within QoC: On 31/12/2009, the QoC programme consisted of 14 FTE tenured staff (mostly senior researchers), 23 FTE non-tenured staff (junior researchers and post-docs), and 20 FTE contract PhD-students.

3.3.2. Overall assessment of the research programme QoC

Overall assessment programme 'Quality of Care': 5 (excellent)

The structure of this programme is different from the other three programmes; it is not disease-oriented but the patient-perspective is of major importance. The EEC is impressed by the achievements of the last years, especially by the end-of-life research and the work performed within the patient-safety programme – both programme parts combine high scientific quality with high societal relevance.

The diversity of the research programme does seem to create some challenges and the EEC noticed that the leaders are struggling with this diversity. The EEC confirmed the intention of the programme leaders to give room to the early development of new emerging research themes (incubator function), but noted that this does represent a difficult balance between the opportunity for innovation in exciting and timely new fields and avoiding the QoC-programme simply becoming the place where research is done which cannot be allocated to any of the other three programmes. The EEC recommends development of a firm strategy for this incubator function, for instance by defining a maximum percentage of research time to be allocated to this function, by stressing the temporary character of the emerging research lines (up or out policy) and by articulating criteria and procedures to end unsuccessful research lines.

The EEC underlines that the leaders should be more aware, confident and proud of their achievements, in particular in realizing a good balance between scientific and societal quality of the research and in succeeding to incorporate the patient perspective in many of its projects. However, the EEC is concerned about the diversity of the research programme in combination with the relatively narrowly-defined research themes within the other EMGO⁺ programmes. The EEC therefore strongly recommends starting a more fundamental discussion

on the nature and direction of the research within the QoC-programme at the level of the institute as a whole.

Overall score 'Quality of Care'	5
Quality	
- Quality and scientific relevance of the research	5
- Leadership	4
- Academic reputation	5
- Organisation	4
- Resources	5
Productivity	
- Productivity and strategy	5
- Productivity	5
Relevance	
- Societal relevance	5
Vitality and feasibility	
- Strategy	4
- Robustness and stability	4

Five point scale used for assessment: 5 = excellent; 4 = very good; 3 = good; 2 = satisfactory; 1 = unsatisfactory.

3.4. Musculoskeletal Health (MSH)

3.4.1. Brief description of the research programme MSH

The mission of the research programme musculoskeletal health (MSH) is to generate and implement knowledge about the development and lifelong maintenance of a healthy musculoskeletal system and about the prevalence, incidence, aetiology, prognosis, prevention and treatment of musculoskeletal disorders. The research programme aims to contribute to evidence-based practice on musculoskeletal disorders and health in the setting of occupational health, primary health care and rehabilitation practice.

The goals of the programme are conducting excellent scientific research, offering excellent courses on research methodology as well as establishing and maintaining an excellent national and international reputation.

Human resources within MSH: On 31/12/2009, 10.89 FTE tenured staff and 15.50 FTE non-tenured staff participated in the musculoskeletal research programme.

3.4.2. Overall assessment of the research programme MSH

Overall assessment programme 'Musculoskeletal Health': 5 (excellent)

The EEC is impressed by the work which has been done within this programme. It has an excellent track record with high impact scientific publications, as well as the production of clinical guidelines which have impacted on practice. The EEC felt that a number of points, should, however, be taken into consideration when planning the future research programme:

More attention could be paid to development of a research strategy. Although this is implicit in the three specific research themes (research methodology; chronic and persistent symptoms; and activities of daily living and participation), the range of these themes is extremely wide and the capacity to integrate biological, radiological, physiological and molecular studies within the epidemiological questions covered, would markedly enhance the programme.

The mission and goals of the programme need to be targeted to the specific outcomes and exposures within musculoskeletal health that will be covered.

There was a suggestion that previous research was of the highest quality, but that when future research themes were explored, there might be a relative lack of innovative research ideas. Thus, the theme of somatisation and musculoskeletal pain, although applicable principally to the back and upper limb, might have limited applicability to other areas of the musculoskeletal system.

Strategic linkage with other disciplines within the University should be actively explored. These include linkage to clinical services (Rheumatology and Orthopaedics) as well as more fundamental sciences (such as imaging and biomechanics). The decrease in indirect funding, substantially more than observed in other research programmes, was also commented on by

the EEC. The group should explore the potential for greater benefit through research collaborations, from the extension of EMGO.

Overall score 'Musculoskeletal Health'	5
Quality	
- Quality and scientific relevance of the research	5
- Leadership	4
- Academic reputation	5
- Organisation	4
- Resources	5
Productivity	
- Productivity and strategy	4
- Productivity	5
Relevance	
- Societal relevance	5
Vitality and feasibility	
- Strategy	4
- Robustness and stability	5

Five point scale used for assessment: 5 = excellent; 4 = very good; 3 = good; 2 = satisfactory; 1 = unsatisfactory.

Appendix 1: Management Letter

Amsterdam, 28/01/2011

First of all, we would like to say again that the committee is hugely impressed by the high quality of research and the way in which the EMGO⁺ Institute is organised. In this letter we summarize some important recommendations given for consideration by the directorate of the EMGO⁺ and the Board of Directors of the VUmc and the University.

Institute

The EEC is evaluating an interfaculty institute and not the university as a whole. Therefore, we cannot make any statements about distribution of resources within the university, but EMGO⁺ would be likely to benefit from a system of allocation directly to the institute based on performance indicators such as the acquisition of external funds. This could prevent the development of a situation in which EMGO⁺ becomes the victim of its own success.

The EEC recommends introducing a system that enables the institute to provide exact numbers on the duration of PhD-trajectories, completion rates and their subsequent career destinations.

The EEC suggests that a critical review of the impact of the current PhD:senior research staff ratio on strategic focus, collaborations and leadership, might be helpful.

The EEC would welcome explicit strategy discussion within the institute and between the institute and the board on the relative importance attached to Crown-indicator and indicators of societal relevance, and consideration of development of markers of the latter.

The EEC is happy to see initiatives around fellowships within EMGO⁺ aimed at strengthening the postdoc early- and mid-career opportunities for talented researchers within the institute. However, in view of the number of people who are working within the institute, the number of fellowships is relatively small and the EEC considers there is a deserving case to increase the number of fellowships.

The four research programmes:

1. Lifestyle, Overweight and Diabetes

The EEC recommends a strengthening of the collaboration between the different parts of the programme, as well as with other programmes and utilization of other well-characterized study populations, in parallel with some consideration of strategic direction.

2. Mental Health

The EEC thinks that it is of importance to strengthen the content and aims of the basic science links and studies, as well as the program's focus on primary prevention.

3. Quality of Care

In order to avoid the Quality of Care programme simply becoming the place where research is done which can not be allocated to any of the other three programmes, it is very important that a fundamental discussion is initiated by the directorate of the institute and the program leaders on the nature and direction of the research within this programme.

4. Musculoskeletal Health

The EEC recommends more discussion on the future vision and research strategy regarding this programme, including linkage with other disciplines within the University, with clinical services (Rheumatology and Orthopaedics), and with more fundamental sciences (such as imaging and biomechanics).

On behalf of the external evaluation committee,

Prof. Harry Rooijmans
(emeritus professor of Psychiatry, chair EEC)

Dr. Amika Singh
(secretary)

Appendix 2: Programme of the Site Visit

Day 1: 22nd of November 2010

08:00 – 09:30	Closed Breakfast Meeting External Evaluation Committee
09:30 – 10:30	Opening session with Directorate <i>Guests: Prof. J. Brug, PhD (Director), Prof. P. Cuijpers, PhD (Vice director), Prof. W. van Mechelen, MD, PhD (Vice director)</i> <ol style="list-style-type: none"> 1. 15 minute presentation 2. Discussion
10:30 – 11:30	Research program: Lifestyle, Overweight and Diabetes <i>Guests: Program directors Prof. G. Nijpels, MD, PhD, Ms. Prof. M. Visser, PhD</i> <ol style="list-style-type: none"> 1. 15 minute presentation 2. Discussion
11:30 – 12:30	Research program: Musculoskeletal Health <i>Guests: Program directors Prof. A.J. van der Beek, PhD, Ms. Prof. H.C.W. de Vet, PhD</i> <ol style="list-style-type: none"> 1. 15 minute presentation 2. Discussion
12:30 – 13:30	Lunch
13:30 – 14:30	Research program: Mental Health <i>Guests: program directors Prof. J.M. Koot, PhD, Ms. Prof. B.W.J.H. Penninx, PhD</i> <ol style="list-style-type: none"> 1. 15 minute presentation 2. Discussion
14:30 – 15:30	Research program: Quality of Care <i>Guests: Ms. Prof. B.D. Onwuteaka-Philipsen, PhD, Ms. Prof. D.R.M. Timmermans, PhD</i> <ol style="list-style-type: none"> 1. 15 minute presentation 2. Discussion
15:30 – 16:00	Tea Break
16:00 – 17:00	EMGO ⁺ Quality Assurance and Control 1: PhD training and supervision <i>Guests: R. Ostelo, PhD (Chair PhD committee), Ms. M.J.M. Chin a Paw, PhD (member PhD committee), Prof. J.W.R. Twisk, PhD (Director)</i>

	<p><i>EpidM</i>), Ms. M.C. Stuij, MSc (Coordinator <i>EpidM</i>).</p> <ol style="list-style-type: none"> 1. 10 minute presentation by R. Ostelo, PhD 2. 50 minutes discussion
17:00 – 17:30	<p>External Advisory Board</p> <p>Guests: Prof. W. van Tilburg, MD, PhD (Chair of Advisory board), Ms. Prof. K. Stronks, PhD</p> <ol style="list-style-type: none"> 1. 5 minute presentation by Prof. W. van Tilburg, MD, PhD 2. Discussion
17:30 – 18:45	<p>Closed Meeting External Evaluation Committee</p>
19:00 – 21:00	<p>Working dinner, meeting with the board of EMGO⁺, Vice Chancellor of the VU University and Directorate. (Location: Restaurant ‘De Halve Maan’)</p> <p>Guests: Prof. W.A.B. Stalman, MD, PhD (Dean of VU University Medical Center and chair of the board), Prof. J. Passchier, PhD (Dean of the faculty Of Psychology & Education and member of the board), Prof. B. Oudega, PhD (dean of the Faculty of Earth & Life Sciences and member of the board)</p> <ol style="list-style-type: none"> 1. 5 minute welcome & introductions by Prof. J. Brug, PhD, director EMGO⁺ 2. 5 minute introduction by Prof. W. Stalman, MD, PhD, dean of VUmc, chair of the EMGO⁺ board 3. Dinner & Discussions

Day 2: 23rd of November 2010

09:00 – 09:30	<p>EMGO⁺ Quality Assurance and Control 2:</p> <p>Science Committee</p> <p>Guests: Ms. I.A. Brouwer, PhD (Chair), Ms. C.R.L. Boot, PhD (Secretary)</p> <ol style="list-style-type: none"> 1. 10 minute presentation 2. Discussion
09:30 – 10:00	<p>EMGO⁺ Quality Assurance and Control 3:</p> <p>Quality Committee</p> <p>Guests: Ms. A. van Straten, PhD (Chair), W.C.H. Kraan, MSc. (member), M. Paardekooper, PhD, (Quality Officer)</p> <ol style="list-style-type: none"> 1. 10 minute presentation 2. Discussion

10:00 – 10:30	<p>PhD students</p> <p>Guests: PhD candidates J. Lakerveld, MSc. /Ms L. Zwaan, MSc./M. Driessen, MSc.</p> <ol style="list-style-type: none"> 1. 5-10 minute presentation 2. Discussion
10:30 – 11:00	Coffee break
11:00 – 11:30	<p>Mid-career Researchers</p> <p>Ms. S.J. te Velde, PhD / Ms. M. Bartels, PhD</p> <ol style="list-style-type: none"> 1. 5-10 minute presentation 2. Discussion
11:30 – 12:45	<p>Academic collaborative centers</p> <p>Guests: Prof. J. Brug, Prof. H. Anema, Dr. M. Chin A Paw, H. Kroneman, MD, PhD (medical advisor at National Institute for Employee Benefit Schemes (UWV)), Ms. J. van Leeuwen, MD, PhD (Child and Youth Health Care North-Holland Vumc), Ms. N. Batelaan, MD, PhD (Mental Health)</p> <ol style="list-style-type: none"> 1. 5 minute introduction Prof. J. Brug, PhD 2. 5 minute presentation by H. Kroneman, MD, PhD 3. 5 minute presentation by Ms. N. Batelaan, MD, PhD 4. 5 minute presentation by Ms. J. van Leeuwen, MD, PhD
12:45 – 13:00	<p>Internationalization of EMGO⁺</p> <p>Guests: Prof. J. Brug, PhD, Prof. P. Cuijpers, PhD, Prof. W. van Mechelen, MD, PhD</p> <ol style="list-style-type: none"> 1. 5 minute presentation by Prof. W. van Mechelen, MD, PhD 2. Discussion
13:00 – 14:00	<p>Working lunch, meeting with the directorate of EMGO⁺.</p> <p>Guests: Prof. J. Brug, PhD, Prof. P. Cuijpers, PhD, Prof. W. van Mechelen, MD, PhD</p>
14:00 – 16:30	Closed Meeting External Evaluation Committee