

Board's position document on
the International Assessment Committee Report 23-25 November 2015

Amsterdam, 20 April 2016

The board thanks the committee for their effort and thorough assessment of MOVE research institute Amsterdam. The board is pleased that the committee values the outstanding potential of MOVE to conduct cross-cutting thematic interdisciplinary research with a highly specific profile and states that the inclusionary integrative approach has the potential to connect across conventional areas of life sciences and beyond, including engineering and mathematics.

Address

MOVE
Van der Boechorststraat 9
1081 BT Amsterdam
The Netherlands
www.move.vu.nl

The board appreciates the committee's rating of the research of MOVE in terms of quality and societal relevance, which were both assessed as 'very good'. With respect to the future of the institute, the committee believes the merger between the VUmc and the AMC provides an excellent opportunity to further strengthen the interdisciplinary research on human movement and the movement apparatus in both healthy individuals and patients. In view of this merger, the committee assessed the viability as 'very good', provided that MOVE strategically positions itself well in the overarching institutional reorganization.

Director

prof. dr. F. Nollet

The committee made a number of valuable recommendations, which the board will take into account. We will briefly explain how these recommendations will be addressed in the strategic plan that is presently being written for the new merger institute of MOVE and relevant AMC research groups.

With respect to the identity and strategic research plan of MOVE, the interdisciplinary themes are redefined in appealing, societal relevant and coherent programs which have in common that they aim to optimize the physical performance of healthy individuals in work, sports and throughout ageing and of patients, in particular those with disorders resulting in impairments of the neuro-musculoskeletal system. These programs will have a clear focus and will be interconnected by a shared scientific knowledge base and methodology with regard to, for example, movement analysis, imaging, cell biology, muscle physiology and biomechanics.

MOVE strives to answer questions from the clinic and from the applied fields of sports, work and aging, by carrying out translational research that integrates basic and applied research. To improve societal relevance and to cover the complete 'valorization chain', MOVE will broaden its research scope in collaboration with the Amsterdam Public Health Institute to include epidemiological, clinical and implementation studies. MOVE will further expand its activities to strengthen its internal interdisciplinary cooperation by organizing meeting platforms to improve the exchange of results between basic and clinical scientists and between scientists involved in different research programs. Furthermore, MOVE will take into account the recommendation to promote a stronger involvement of patients and other end-users.

Besides the continuation of the quality control of PhD trajectories by MOVE, as appreciated by the committee, the value of being a member of MOVE will be increased by setting up an integrated and interdisciplinary MOVE course for PhD candidates, which builds on the existing interdisciplinary research master in Movement Sciences. Attention will be paid to facilitate career pathways for post docs and for clinician-scientists acting in MOVE, who are usually embedded in relatively small clinical departments. Scientists at all levels are strongly engaged in developing the strategic plan for the new MOVE-AMC research institute, both with respect to its research focus and to encouraging collaboration, as well as to supporting research, education and career perspectives.

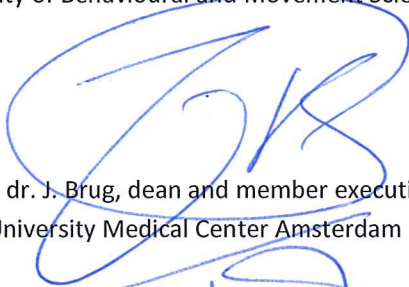
With respect to the appointment of research leaders, the issue of diversity is currently scrutinized. The recommendation to extend the consideration of this issue to all levels, including the management, will be taken into account.

The recommendations to develop clear strategies and measures to improve branding and marketing, to handle intellectual property and to warrant research integrity, including safe data management across the different parties participating in MOVE, will be taken into account.

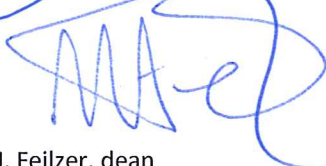
Within the constraints of MOVE being a research network and the budgetary restraints of its founding institutes, the board will work towards further strengthening the organizational, budgetary and infrastructural support for the institute, facilitating the interdisciplinary collaboration and increasing its steering power to further develop MOVE as an internationally leading research institute.



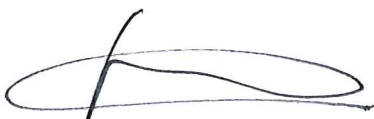
prof. dr. P.J. Beek, dean
Faculty of Behavioural and Movement Sciences, Vrije Universiteit Amsterdam



prof. dr. J. Brug, dean and member executive board
VU University Medical Center Amsterdam



prof. dr. A.J. Feilzer, dean
Academic Center for Dentistry Amsterdam



prof. dr. F. Nollet, director
MOVE research institute Amsterdam

MOVE research institute amsterdam
International Assessment Committee Report
23-25 November 2015



External evaluation

This report describes the findings of an international assessment committee that convened in November 2015 to perform an assessment of the research conducted by the MOVE research institute amsterdam (hereafter described as MOVE). This assessment was conducted at the request of the board of VU University Amsterdam.

Periodic external evaluation of scientific research is to be conducted by an assessment committee according to the standard evaluation protocol (SEP) 2015-2021 as established by the Netherlands to reveal and evaluate research quality and its relevance to society, and to make recommendations to improve these when necessary. Assessment of the quality and relevance of research fulfill a duty of accountability towards government and society.

This assessment focuses on the strategic choices and future prospects of the research institute MOVE having a focus on interdisciplinary and interfaculty collaboration, and clinical relevancy of the research.

The findings of this assessment include ratings about the research quality, relevance to society and viability, and recommendations concerning these criteria, as well as others on the PhD program and research integrity according to the SEP protocol 2015-2021. Appendix 1 provides an explanation of the rating categories.

The international assessment committee members were the following:

Prof. dr. Georg Duda, Director of the Julius Wolff Institute and W3-Professor for Biomechanics and Musculoskeletal Regeneration, Charité - Universitätsmedizin Berlin, Germany, *Chair*

Prof. dr. Bruce Abernethy, Executive Dean, Faculty of Health and Behavioral Sciences, The University of Queensland, Australia

Prof. dr. Marc D. McKee, Associate Dean for Graduate Studies and Research, Faculty of Dentistry, McGill Institute for Advanced Materials, McGill University, Montreal, Canada

Prof. dr. Gisela Sjøgaard, Head of Research Unit, Dept. of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark

Prof. dr. Katharina Stibrant Sunnerhagen, Professor/chief physician of Rehabilitation Medicine, Institute of Neuroscience and Physiology, Section for Clinical Neuroscience and Rehabilitation, the Sahlgrenska Academy, University of Gothenburg, Sweden

Ingrid C. Lether, MSc, Manager Research and Innovation, Dutch Arthritis Foundation

Dr. Sanneke A.M. van Vliet, Research Office, Academic Medical Center, Amsterdam, *secretary*

The research focus of the committee members are described in appendix 2.

This assessment is based on documentation provided by MOVE and on a site visit by the committee on 23rd – 25nd November 2015. The documentation provided to the committee included a Self-assessment Report 2008-2014 based on the SEP 2015-2021 template with supplementary information, annual reports 2008-2014, mid-term review MOVE 2008-2010, and recommendations of the VU-UTC based on the mid-term review.

The site visit included meetings with MOVE's board, management board, theme representatives, associate and assistant professors, postdoctoral fellows, PhD students, representatives of the PhD program, and lab visits at the three faculties. The site visit program is included as Appendix 3.

On the third and final day, after a closed meeting of the assessment committee, the preliminary observations of the assessment committee were presented verbally to a large audience of MOVE members.

MOVE

The MOVE research institute amsterdam (MOVE), was founded by the VU University in January 2008 to stimulate interdisciplinary and translational research between researchers from the Faculty of Human Movement Sciences and different departments of the VU University Medical Center (VUmc) and the Academic Centre for Dentistry Amsterdam (ACTA).

The mission of MOVE is “to conduct excellent scientific research on human movement and the movement apparatus of healthy individuals and patients, with the long-term aim to improve, maintain and/or repair the moving function”.

The MOVE directorate is responsible for the quality, ambition, focus and output of the research, whereas the faculties provide the necessary resources (partial financial support, personnel, infrastructure).

The researchers are appointed to one of the three participating faculties. Faculty contributions are generally “in-kind” with the faculties having different allocation models. The faculties provide a general budget for the MOVE directorate to run the institute (see Appendix 4).

The research in MOVE is concentrated within three themes: Sports, Rehabilitation, and Regenerative Medicine, with a shared interest in addressing issues of an ageing society.

Research Quality

The quality of research done at MOVE, as a result of our evaluation of past performance, is qualified as being very good.

Overall, the research conducted at MOVE is internationally recognized, although there is variability in quality between and within the different themes.

The researchers of MOVE, as do the assessment committee members, recognize the added value of this interdisciplinary institute and highly appreciate its role in stimulating and facilitating collaborations to create an inspiring and innovative research environment cutting across faculties and departments. The mission, goals and structure of MOVE are viewed as innovative and trendsetting, resulting in a unique way of thinking amongst its members. The committee encourages further development of this unique “mindset” to consolidate and maximize MOVE’s aspirations. Also noted by the committee was that MOVE has a critical mass of researchers, post-docs and PhD students for its core research themes, and that such clustering under a specific theme “MOVE” results in increased external visibility.

This appreciation from the research community is also reflected in increasing MOVE membership. Coincident with this, however, is the need to maintain focus on excellence and effectiveness.

MOVE covers a very impressive and broad spectrum of infrastructures and facilities.

Collaborations between some MOVE research groups are strong, where ACTA functions as a hub (e.g. for providing biological measurements of samples), but for other themes there is room for improvement in establishing more cross-linkages (e.g. research on sports could as well benefit from research in the clinical setting, and vice versa).

MOVE is tending to use its research themes as a representation for external communication, although within the internal organization affiliation with these themes seems to be less strong. The current theme topics did not give the impression of clearly and accurately representing the research actually being done within MOVE. A renaming of the topics is recommended, which could help to establish cohesion within MOVE. For example, the topic Regenerative Medicine could be renamed as Mechano-biology to be more inclusive and more representative of the work actually being done, and instead of Sports, the term Human Performance could be used, in this case better covering the spectrum from extreme performance (elite sports) to limited performance (clinical) in disease and disability.

The committee acknowledges the work that has been done in past years to develop the institute, with its unique vision and with its already-established interdisciplinary projects. There are many opportunities to strengthen MOVE's position, but visionary leadership and key decisions are needed to consolidate the unique interdisciplinary efforts of the institute and to make the appropriate strategic decisions to bring this institute to the next level.

Relevance to society

Research at MOVE makes a very good contribution to society.

Societal impact and translational research are intertwined core objectives and the very premise for the mission of this interdisciplinary research institute. However, because of this emphasis, continuous pro-active leadership and focus on the relevance-to-society of the research is needed to meet these goals. The institute has (and should indeed always have) an important role in stimulating this societal awareness among its researchers. Through strategic use of MOVE output, expertise and its innovative mission, the "branding" of MOVE could be leveraged as an effective central service point for interested external parties to link to MOVE research groups and interests.

An underpinning rationale for most research is to solve societal problems. However, amongst basic science researchers, awareness of how to bring this knowledge beyond their research field or to involvement of potential end-user groups is often lacking. With visionary leadership, MOVE has the means and structure to do this, although more thought and pro-activity are needed to develop this further. At the other end of the spectrum, there are examples within MOVE of state-of-the-art research that aim jointly with external parties at translation, but a feedback link to bringing knowledge back to basic science appears to be still missing. Another opportunity lies in extending and strengthening the links between basic science research and the clinical setting, an observation also noted by MOVE in their self-assessment. These issues are not indeed unique to MOVE, but the institute can, and would do well to capitalize on this.

Research within MOVE covers research from molecular biological processes through to studies on applied and behavioral interventions, and to clinical research. However, few examples exist of research topics that passed through the translational value chain. That in itself would not necessarily be such a concern, if MOVE had not position itself so

strongly on the aspect of translation. Indeed, a number of very nice examples of translation (*e.g.* in sport) seem not to be considered, where an overarching translational concept appears to be missing. Such an overarching concept with a focus on learning across disciplines could be a particular strength of MOVE, and further developed within its other themes.

MOVE is well equipped to tackle the societal problem of ageing, particularly since it houses research on human performance ranging from the disabled individuals to elite athletes. In order to capitalize on this knowledge further, collaboration with the end-users such as patient as partners, is important.

Viability

The MOVE institute is in an important transitional phase in relation to the structural reorganization of its founding institutions, where MOVE's own strategic plan is currently under development in the context of these upcoming institutional changes. If MOVE continues on its current trajectory without strategically positioning itself well within the pending overarching institutional reorganization, the viability of the institute will be only reasonably well-equipped for the future, thus being rated in the good category. On the other hand, with strong pro-active leadership, vision and a clearly articulated strategic research plan as part of the larger founding institutional reorganizational plan, MOVE has ample potential to develop towards an increasingly strong, internationally positioned institute very well-equipped for the future.

The assessment took place in a period with many changes within MOVE itself (including leadership change) and also involving the faculties/departments/hospitals, and the assessment review was clearly impacted by this ongoing situation of change. Key landscape changes at or around the time of the review included:

- Reorganization of MOVE management: From 1st March 2015 Prof. Nollet was appointed part-time director. As a clinician from the AMC, he is new to MOVE and is a strategic appointment in view of the alliance with the AMC. He established an interim Management Board with new members, installed on 1 September 2015.
- The merger of the Human Movement Sciences faculty with the Behavioral Sciences faculty since 1st June 2015 appears to be an active process leaving it unclear to this assessment committee as to the impact and future affiliation of researchers from that Faculty with MOVE.
- Overall, the upcoming alliance between the two academic hospitals in Amsterdam, VUmc and AMC appears to be largely influencing research strategy and politics with details yet to be finalized and made clear. However, the start of the AMC-MOVE Research Institute of Human Movement is already planned for 1st January 2017.

MOVE is at a crossroads, with interesting opportunities and exiting new ways to develop and grow. For example, there are opportunities to integrate related research topics like cognitive neurosciences from the newly merged faculty, musculoskeletal rehabilitation and imaging from AMC research groups. As well as to strengthen the interaction between inactivity-related chronic disease prevention and management and clinical research on movement, as the VU/VUmc research institute of health and care research (EMGO+) is reconsidering its position and focus within the alliance.

Recommendations for MOVE

Given that:

- The ideas behind MOVE are unique and innovative, and that there is outstanding potential for this institute, including cross-cutting thematic research and a unique opportunity to position the university with a highly visible specific profile that allows distinctive interdisciplinarity;
- MOVE has the novel potential to innovatively break away from more traditional, compartmental theme designations;
- MOVE has an inclusionary integrative approach that has the potential to connect in a meaningful way across conventional areas of life sciences such as cardiovascular diseases, immunity, cancer, neuroscience, as well as beyond, towards engineering, mathematics.
- The current overarching structure from which MOVE derives its composition - from ACTA, VU Faculty Behavioral and Human Movement Sciences, and VUmc - represents very relevant contributions from these institutions to MOVE.

The assessment committee gives the following recommendations:

Preamble

MOVE was perceived by the assessment committee to be a research network, lacking the shared infrastructure and discretionary funding typical of most comparable research institutes internationally and this is making progress and innovation difficult. Only with its own funding, substantial core facilities and other shared infrastructure, and only with further investments in this research institute, and more specifically a high profile with support under the new institutional alliance/merger, will MOVE be able to realize its full potential.

Recommendations to the executive board of the VU University

Structural investments in MOVE are needed to sustain and improve organizational structures, strength and steering power of the institute. This is essential to secure and develop the position of MOVE as unique, highly visible and internationally recognized institution.

Recommendations to the directorate of MOVE

1) That MOVE better defines and describes its identity, both internally and externally. MOVE must establish and state a clearer, coherent vision, and be proactive in defining and articulating the added value proposition that illustrates how MOVE is more than the sum of its individual parts, and how it is a leader in interdisciplinary research.

2) That MOVE leadership secures as soon as possible confirmed support at all levels within the new institutional reorganization, and that MOVE develops immediately a strategic research plan that harmonizes its goals with the new organizational structure. The formation and implementation of such a plan will require strong and visionary leadership, supported by the principal investigators of MOVE. The strategic research plan, informed by a wide range of scientists at all levels (including trainees) and other stakeholders, should address the following:

- the priorities of MOVE
- timelines and plans for implementation
- the resources (and how to obtain them) required for the implementation

- differentiation of MOVE activities from the other seven overarching themes of the AMC-VUmc alliance/merger
- a clear strategy on how to develop scientific foci and eventually renaming of the themes to make them internationally recognized and to establish cohesion within MOVE
- a clear translational strategy that includes unambiguous definition of the term as well as overarching measures for translation across the various fields within MOVE
- a clear strategy of how to establish and develop distinct and fruitful relationships with various clinical departments, which includes facilitating career pathways for clinician-scientists
- a marketing and “branding” strategy that engages stakeholders and facilitates fundraising from a wide variety of sources
- patient and end-user participation

3) That MOVE provides a clear, readily available description of how it builds upon existing faculty and departmental PhD programs, and that MOVE investigators join together to develop an “integrated, interdisciplinary MOVE course” that establishes the added benefit of being a MOVE graduate student. A student-led research retreat is also recommended to empower the involvement of graduate students in MOVE. A budget for student awards should be in place to foster MOVE appreciation and allegiance. The quality control element of the MOVE PhD concept was appreciated and should be continued, but it remained unclear as to how this interacts with the existing PhD programs.

4) That postdoctoral research fellows, being an important but vulnerable group, have systematic mentoring and career guidance within MOVE. Indeed, this could be a “selling point” for the launch of their careers. Similar to PhD students, they should also be empowered to be involved in the scientific and strategic development of MOVE, which should include a seat in the steering committee.








5) That awareness of membership diversity (at all levels, including in MOVE management structure) and awareness of career progression and successional planning be improved, to include gender, age and functional-limitations diversity, amongst others.

6) That a clear strategy be articulated on research integrity, and that this be made very visible, especially since MOVE is an inter-faculty institute working across multiple locations and research structures. It is also recommended that a core element be the installation of a data management approach that covers data storage, access, reliability and ownership, and that clear strategies on how to solve authorship and intellectual property issues are handled, and that this should be made widely known within MOVE.

Appendix 1 – Explanation of the categories in SEP 2016-2021

Category	Meaning	Research quality	Relevance to society	Viability
1	World leading/ excellent	The research unit has been shown to be one of the few most influential research groups in the world in its particular field.	The research unit makes an outstanding contribution to society.	The research unit is excellently equipped for the future.
2	Very good	The research unit conducts very good, internationally recognised research.	The research unit makes a very good contribution to society.	The research unit is very well equipped for the future.
3	Good	The research unit conducts good research.	The research unit makes a good contribution to society.	The research unit makes responsible strategic decisions and is therefore well equipped for the future.
4	Unsatisfactory	The research unit does not achieve satisfactory results in its field.	The research unit does not make a satisfactory contribution to society.	The research unit is not adequately equipped for the future.

Appendix 2 – Short CVs of the committee members

	<p>Name: Professor Dr. George Duda (Chair) (click name for web page) Position: Director of the Julius Wolff Institute and W3-Professor for Biomechanics and Musculoskeletal Regeneration Department: Charité - Universitätsmedizin Berlin, Germany Research Focus: Biomechanics of locomotion, celmechanics, sportsbiomechanics, tissue engineering, rehabilitation</p>
	<p>Name: Professor Dr. Bruce Abernethy (click name for web page) Position: Executive Dean Department: Faculty of Health and Behavioural Sciences, The University of Queensland, Australia Research Focus: Sensorimotor control, Sport</p>
	<p>Name: Professor Dr. Marc D. McKee (click name for web page) Position: Professor and Associate Dean for Graduate Studies and Research Department: Faculty of Dentistry, McGill Institute for Advanced Materials, McGill University, Montreal, Canada Research Focus: Mineralization (calcification) of extracellular matrices in bones and teeth</p>
	<p>Name: Professor Dr. Gisela Sjøgaard (click name for web page) Position: Professor and Head of Research Unit Department: Dept. of Sports Science and Clinical Biomechanics, University of Southern Denmark, Odense, Denmark Research Focus: Human exercise physiology, muscle mechanics and metabolism, musculoskeletal disorders</p>
	<p>Name: Professor Dr. Katharina Stibrant Sunnerhagen (click name for web page) Position: Professor/chief physician of Rehabilitation Medicine Department: Institute of Neuroscience and Physiology, Section for Clinical Neuroscience and Rehabilitation, the Sahlgrenska Academy, University of Gothenburg, Sweden Research Focus: Rehabilitation, stroke, cerebral palsy, disability, cardiac arrest</p>
	<p>Name: Ingrid C. Lether MSc. (click name for web page) Position: Manager Research and Innovation Department: Dutch Arthritis Foundation /Reumafonds</p>
	<p>Name: Dr. Sanneke A.M. van Vliet (Secretary) Position: Member AMC Research Office, Research Council Department: Academic Medical Center, (AMC) Amsterdam, The Netherlands</p>

Appendix 3 – Programme site visit

Day 1 (Nov 23)

- 12.30 - 13.00 Lunch/Introduction by Professor Dr. Frans Nollet, research director MOVE
- 13.00 - 14.30 Committee meeting: procedures, tasks of the members, evaluation of written materials
- 14.30 - 15.10 Meeting with the board of MOVE (Professor Dr. Peter Beek, Dean Faculty of Behaviour and Movement Sciences and chair of the board; Professor Dr. Albert Feilzer, Dean Academic Centre for Dentistry Amsterdam; Professor Dr. Hans Brug, Dean VU University Medical Center); Professor Dr. Frans Nollet
- 15.15 - 18.00 Interviews with representatives of the three MOVE themes, (names of presenters in bold)
- 15.15 - 16.05 *Sports*
Dr. Jos de Koning, Dr. David Mann, Professor Dr. Hein Daanen, Dr. John van der Kamp, Professor Dr. Geert Savelsbergh, Professor Dr. Frans Nollet
- 16.10 - 17.00 *Regenerative Medicine*
Professor Dr. Sue Gibbs, Professor Dr. Ir. Theo Smit, Professor Dr. Jenneke Klein Nulend, Dr. Cees Kleverlaan, Professor Dr. Willem Lems, Professor Dr. Marco Ritt, Professor Dr. Frans Nollet
- 17.05 - 17.55 *Rehabilitation*
Professor Dr. Jaap van Dieën, Professor Dr. Ir. Jaap Harlaar, Professor Dr. Vincent de Groot, Professor Dr. Thomas Janssen, Professor Dr. Gert Kwakkel, Professor Dr. Frank Lobbezoo, Professor Dr. Frans Nollet
- 18.00 Return to hotel/apartment
- 19.00 - 21.00 Dinner / Committee meeting

Day 2 (Nov 24)

- 8.15 Pick up at hotel
- 8.45 - 9.15 *Assistant and Associate Professors*
Dr. Astrid Bakker, Dr. Nadia Dominici, Dr. Richard Jaspers, Dr. Huub Maas, Dr. Margriet Mullender, Dr. Melvyn Roerdink
- 9.15 - 9.45 *Post-docs*
Dr. Ghizlane Aarab, Dr. Sjoerd Bruijn, Dr. Gert Faber, Dr. Marjolein van der Krogt, Dr. Koen Levels, Dr. Ir. Josien van den Noort, Dr. Myrthe Plaisier
- 9.50 - 10.35 *PhD candidates*
Mina Arvin, Kerensa Beekman, Michel Bernabei, Daniëlle Bouman, Lizeth Sloot, Hessam Tabeian, Stefan van der Zwaard
- 10.40 - 11.10 *PhD programme*
Professor Dr. Jaap van Dieën, Dr. Martijn van Steenbergen, Professor Dr. Frans Nollet, Solveig Lund
- 11.15 - 11.45 *Research policy*
Professor Dr. Sue Gibbs, Professor Dr. Jaap van Dieën, Professor Dr. Jaap Harlaar, Dr. Richard Jaspers, Professor Dr. Frank Lobbezoo, Professor Dr. Ir. Theo Smit, Professor Dr. Frans Nollet
- 11.50 - 12.20 *Valorization and societal impact*
Professor Dr. Andrea Maier, Dr. Raoul Oudejans, Dr. Mirjam Pijnappels, Dr. Melvyn Roerdink, Dr. Corine Visscher, Prof. Dr. Frans Nollet
- 12.20 - 13.30 Lunch / Committee meeting
- 13.30 - 16.30 Visit to the research facilities at MOVE:

ACTA: (13.30 - 14.15)

- 13.30 - 13.45 Oral Kinesiology Lab (Professor Dr. Frank Lobbezoo) (3N-86)
and Polysomnography Lab (Dr. Ghizlane Aarab) (3N-78)
13.45 - 14.00 Dental Materials Science Lab (Dr. Cees Kleverlaan) (10N-16)
14.00 - 14.15 Oral Cell Biology Lab (Professor Dr. Sue Gibbs) (11N-14)

VUmc: (14.30 - 15.30)

- 14.30 - 14.45 Dermatology Lab (Professor Dr. Sue Gibbs) (VUmc - PK 2 hal 34)
14.45 - 15.00 3D Innovation Lab (Professor Dr. Tim Forouzanfar) (VUmc- 2Z0 42)
15.00 - 15.15 Clinical Gait Lab & Virtual Reality Lab (Prof. Dr. Ir. Jaap Harlaar) (VUmc- -1B)

FBM: (15.45 – 16.30)

- 15.45 - 16.00 Myology Lab (Dr. Richard Jaspers) (MF-A411)
16.00 - 16.15 Trunk Control Lab (Professor Dr. Jaap van Dieën) (MF-H432)
16.15 - 16.30 Interactive Walkway (Dr. Melvyn Roerdink) (MF-B633)
- 16.45 - 17.45 Interdisciplinary Research within MOVE
16.45: Dr. Nadia Dominici and Dr. Marjolein van der Krogt; *FirSTeps – the emergence of walking in children* (provisional)
17.15: Professor Dr. Ir. Jaap Harlaar and Dr. Marco Helder: *From cell to tissue to in vivo: biomechanics of cartilage (de)generation in knee osteoarthritis*
- 19.00 - 21.00 Dinner with invited MOVE scientists and the research committee (ACTA – room # 8N-01)
21.15 Return to hotel/apartment

Day 3 (Nov 25)

- 8.20 Bus ready at hotel
09.00 - 11.00 Committee meeting and writing of the draft report; if necessary additional interviews
11.00 - 11.15 Presentation of preliminary findings by the chairman of the committee for all MOVE scientists ACTA – 0Z-04 (small lecture hall)
11.15 - 12.00 Informal meeting (with coffee and Dutch cookies) for all participants of the site visit ACTA – 0Z-04 (small lecture hall, ground floor)
12.15 Return to hotel / taxi to airport / train station

Appendix 4 – Composition and financing of MOVE

Research staff composition

Table 1. Number of MOVE members

Staff members	2008	2009	2010	2011	2012	2013	2014
Tenured staff	74	79	73	81	108	103	101
Non tenured staff	20	24	22	25	27	43	67
PhD candidates	65	73	79	89	110	111	100
Total # of staff	159	167	174	195	245	257	268

Table 2. Research staff including PhD per participating faculty (fte – full time equivalent)

Research Staff	2008	2009	2010	2011	2012	2013	2014
ACTA	16.3	17.3	14.9	15.9	27.2	27.7	25.3
VUmc	19.5	23.9	23.6	25.4	33.9	34.5	37.9
HMS	38.3	38.8	42.6	47.1	51.8	50.4	50.2
Total	74.1	79.9	81.1	88.4	112.9	112.6	113.4

Funding

Table 3. Research staff including PhD candidates per type of funding (fte)

Research Staff	2008	2009	2010	2011	2012	2013	2014
direct funding	49.4	48.7	43.6	44.4	51.0	48.0	45.7
research grants	16.1	17.6	18.8	18.1	25.4	24.8	29.5
contract research	8.5	12.6	18.7	26.0	36.5	39.8	38.2
Total	74.0	80.0	81.1	88.4	112.9	112,6	113,4
PhD candidates on direct funding	18.6	20.4	19.2	18.1	19.7	14.2	9.4
PhD candidates on research grants funding	11.7	13.5	11.2	9.6	14.8	13.6	16.1
PhD candidates on contract research funding	6.9	11.1	13.8	21.4	29.3	30.4	26.6
Total fte PhD candidates	37.2	44.9	44.5	49.1	63.8	58.1	52.0

Table 4. Personnel budget including PhD candidates per type of funding (in k€)*

Type of funding	2008	2009	2010	2011	2012	2013	2014
Direct funding	3.466	3.351	2.933	3.269	3.528	3.533	3.536
Research grants	916	976	1.098	1.274	1.756	1.572	1.874
Contract research	455	637	1.002	1.642	1.893	2.173	2.188
Sum total	4.837	4.964	5.033	6.185	7.177	7.278	7.598
% external funding	28	33	42	47	51	52	53

* The amounts of funding are calculated by multiplying fte's by Mean Personal Costs (MPC). For 2014 for tenured and non tenured staff a MPC of kEuro 85.7 is used. For PhD candidates, a MPC of kEuro 44.9 is used.