The aim of the Master programme Lifestyle and Chronic Disorders is to provide students with knowledge and skills in advanced methods in the field of lifestyle and chronic disorders and to enable students to pursue in a Ph.D. trajectory.

A general, yet diverse, two-year programme will guarantee an elaborate research experience founded on a solid theoretical basis combined with communicative skill that are necessary to function on an international level.

The year schedule 2012 - 2013 can be found at the FALW-website.
A complete programme description can be found at the FALW-website.
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Expired programme components LCD

MSc LCD, First year

Programme components:

- First year LCD, optional courses
- First year LCD, compulsory courses

First year LCD, optional courses

Courses:

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First year LCD, compulsory courses

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MSc LCD, second year

Programme components:
- Second year LCD, internship 60 EC
- Second year LCD, internships 30 EC

Second year LCD, internship 60 EC

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Second year LCD, internships 30 EC

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Advanced Statistics

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<td>Fac. der Aard- en Levenswetenschappen</td>
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<td>prof. dr. J.W.R. Twisk</td>
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Doel vak
After this course, the students will understand the basic principles of multilevel analysis and longitudinal data analysis. Furthermore, they will be able to perform these techniques with standard software packages: level 3

Inhoud vak
In the lectures several aspects of advanced methodology will be introduced and discussed. In the computer- practical, these advanced methods will be applied with several software packages, such as SPSS, MLwiN and STATA. In the last part of the course, the students will get a
complicated dataset and they have to answer a complicated research question. The results of their analyses must be written in a 'short' paper and must be presented in an oral presentation. The following advanced methodological topics will be discussed:

- Multilevel analysis
- Longitudinal data analysis

Onderwijsvorm
- Lectures
- Computer practical
- Research assignment
- Oral presentation
- Writing part of a scientific paper

Toetsvorm
Written exam (50%)
Oral presentation (25%)
Paper (25%)
All three parts must have been graded at least 6

Literatuur
- Sheets of the lectures

Vereiste voorkennis
Students must have knowledge of 'standard' linear, logistic and Cox-regression analysis.

Caput Human Nutrition. Obesity and Diabetes Mellitus 2

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<tr>
<td>Coördinator</td>
<td>dr. ir. I.A. Brouwer</td>
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Doel vak
To understand the strengths and weaknesses of different research methods and to develop optimal research designs

Inhoud vak
The topics that will be addressed are:

- Update of the current scientific controversies in the area of human nutrition, obesity and diabetes Mellitus 2
- Strengths and weaknesses of experimental research designs
- Strengths and weaknesses of observational research designs
- Appraisal of the totality of scientific evidence

Onderwijsvorm
Discussions with senior and junior researchers. Students will design and perform an experimental study in human volunteers.
Toetsvorm
Evaluation of a verbal presentation, a paper and essays

Literatuur
Will be provided by the researchers

Caput Lifestyle and Successful Aging

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<tr>
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<td>prof. dr. ir. M. Visser</td>
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Doel vak
To understand the strengths and weaknesses of different research methods in human nutrition research and to develop optimal research designs

Inhoud vak
Some examples of the topics that will be addressed are:
- Defining successful aging in research
- Time trends in lifestyle and health of older persons
- Relationship of lifestyle with health and functional outcomes
- Undernutrition in older persons
- Obesity and its consequences in old age
- The components of physical activity (strength, endurance, flexibility, balance) and successful aging
- Challenges in assessing lifestyle in older persons

Onderwijsvorm
Discussions with senior and junior researchers, essays, design and performing an experiment

Toetsvorm
Grade will be based on the research letter

Literatuur
Will be provided by the researchers

Caput Mental Health Research

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<td>Coördinator</td>
<td>prof. dr. B.W.J.H. Penninx</td>
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Doel vak
To provide a solid basis in elementary aspects of mental health research

**Inhoud vak**
- Provide basic introduction to the mental health field, with an emphasis on the most common disorders (i.e. depression and anxiety disorders): introduction to psychopathology, assessment of psychopathology and pathophysiology.
- Psychiatric epidemiology: Learning some key figures about: a) the prevalence of common mental health disorders (i.e. depression and anxiety disorders), b) psychiatric comorbidity, c) etiological models, and d) high-risk groups.
- Prevention of depression and anxiety disorders; understand potential interventions, estimate cost-effectiveness of mental health prevention.
- Interaction between psychiatric and somatic health; understand potential underlying biological and behavioral mechanisms.

**Onderwijsvorm**
Lectures, literature study, computer exercise, essays

**Toetsvorm**
Evaluation of verbal presentation of a paper, written exam

**Literatuur**
Beekman AT et al. Preventie van psychische ziekten. NTVG 2006; 150: 419-23.

**Caput Musculoskeletal Health and Work**

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<td>dr. R.W.J.G. Ostelo</td>
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**Doel vak**
Obtain knowledge and competence to perform research in the field of musculoskeletal health and work

**Inhoud vak**
- State of the art of most important musculoskeletal disorders (e.g. back pain, osteoarthritis)
- Prevalence, incidence and impact on patients and society (i.e. quality of life and work absenteeism)
- Most important outcome dimensions (e.g. pain, limitations in activity, sick leave)
- Frequently used outcome measures (questionnaires, observational methods)
- Etiology and prognosis (risk factors, course, determinants of course)
- Effective lifestyle interventions (e.g. exercise, physical activity,
return to work programs)
- examples of excellent research on musculoskeletal disorders in primary care, the occupational setting and rehabilitation

**Onderwijsvorm**
Lectures, working groups and work place visits (e.g research and development department of rehabilitation centre, or occupational health care setting), including writing brief reports
Assignments on judging research proposals and research papers, including writing brief reports
Assignment on writing a research proposal or paper

**Toetsvorm**
The final mark will be based on the brief reports (70%) and the paper on the assignment (30%)

**Literatuur**
A selection of papers on recent research on musculoskeletal disorders in primary care, the occupational setting and rehabilitation.

**Caput Overweight Prevention in the Young**

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<td>Lesmethode(n)</td>
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**Doel vak**
Students will learn to:
1. develop and discuss a concept research protocol in the field of prevention of overweight in children and youth;
2. set up and carry out research on prevention of overweight in children and youth (literature search, data collection, conduct analysis, reporting);
3. make a scientific poster;
4. present and discuss the results of the research to student colleagues.

**Inhoud vak**
Examples of the topics that will be addressed are:
- Theoretical background of the prevention of overweight in the young
- Performing research on prevention of overweight in the young
- Tracking of overweight
- Sedentary behaviour and biomedical health
- Child health care

**Onderwijsvorm**
In order to achieve the learning objectives, students follow three forms of tuition: lectures/meetings, workplace visits and a research assignment.
At the end of the caput, the results of the assignment will be presented in a poster presentation.
**Toetsvorm**
This course requires 100% attendance for all planned teaching activities. The final grade for this caput will be based on:
- 50% scientific poster
- 30% presentation
- 20% workplace visit reports
Students receive guidelines for all aspects of the assessment during the first meeting.

**Literatuur**
Literature and other course material will be provided on Blackboard.

**Overige informatie**
Minimum number of participants: 6

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**Caput Physical Activity**

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<td>Coördinator</td>
<td>dr. M.N.M. van Poppel</td>
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**Doel vak**
This course aims to give an overview of the main issues in physical activity research. Furthermore, the student will gain insight in measurement issues concerning physical activity.

**Inhoud vak**
The topics that will be addressed are:
- Physical activity throughout the lifespan;
- Different dimensions of physical (in)activity and physical fitness;
- Students will actively engage in:
  - performing several measurements of physical activity and physical fitness;
  - Discussion of the pros and cons of several measurement options for different purposes.

**Onderwijsvorm**
Lectures, workgroups, practicum

**Toetsvorm**
Written exam

**Literatuur**
- A selection of key articles.

**Clinimetrics**

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<th>Vakcode</th>
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Doel vak
To gain knowledge on the design and statistical methods for developing health status measurement instruments and for assessing their measurement properties. At the end of the course, students should be able to develop, evaluate and compare the quality of health status measurement instruments.

Inhoud vak
The topics that will be addressed are:
- Evaluation of the measurement properties of an existing health status measurement instrument: internal consistency, reliability, measurement error, validity, responsiveness, interpretability;
- Measurement models: Classical Test theory, Generalizability Theory, Item Response Theory;
- Methodology of a systematic review of measurement properties: search strategies and selection of measurement instruments, applying quality criteria to (studies on) measurement instruments to choose the best instrument based on their measurement properties and considering practical issues.
- Development of a new health status measurement instrument: devising items, scaling responses, item selection, item reduction.

Onderwijsvorm
Lectures and working groups

Toetsvorm
Writing an article (75%) and additional assignments (25%)

Literatuur

Overige informatie
Co-ordinators: dr. C.B. Terwee and prof. dr. ir. H.C.W. de Vet (both VUmc)

Economic Evaluation
Doel vak
After finishing the course Economic Evaluation the student has obtained knowledge of HTA research and specifically economic evaluations. The student is able to choose between a trial-based or model-based study to answer his/her research question. The student is aware of the challenges associated with performing economic evaluations and is able to design an economic evaluation while taking into account these challenges. The student is able to analyse, interpret and report cost-effectiveness data from trial-based and model studies. Finally, the student is able to critically read and judge the quality of cost-effectiveness trials and model studies.

Inhoud vak
The course will include the following topics:
- Cost-effectiveness and cost-utility analysis
- Measuring, valuing and analyzing costs
- Quality of life, utilities and QALYs
- Monetary valuation of QALYs, informal care and productivity losses
- Bootstrapping
- Cost-effectiveness ratios and planes
- Acceptability curves
- Net-benefit framework
- Sensitivity analysis
- Decision tree analysis
- Markov modelling
- Guidelines for (pharmaco)economic evaluations
- Interpretation and reporting of results of economic evaluations
- Use of cost-effectiveness information in health care policy
- Obtaining research grants for health economic research

Onderwijsvorm
Lectures, assignments, computer exercises

Toetsvorm
Two assignments and a written examination. The final grade is based on the assignments (50%) and the written examination (50%) which both should be a 6 at least.

Literatuur
Drummond MF, Sculpher MJ, Torrance GW, O'Brien BJ, Stoddart GL. Methods for the Economic Evaluation of Health Care Programmes. New York: Oxford University Press, 2005 (this may be subject to change)
Additional literature on Blackboard

Doelgroep
Students following the research master Lifestyle & Chronic Disorders or the master Health Sciences and other interested master students

Ethics in Public Health
Doel vak
Analysing and understanding the ethical aspects of public health research, enabling students to make responsible decisions in research

Inhoud vak
Recent case studies will be analyzed concerning topics as lifestyle enhancement, reproductive technologies, health care research, and preventive health care. Three sessions are dedicated to student presentations which will be discussed in plenary sessions. In three other sessions, the lecturer will introduce and discuss actual developments in the ethics of public health: reproductive technologies; prevention and lifestyle enhancement; medical research involving human subjects. Also, throughout the course, attention will be paid to the practical relevance of fundamental ethical-philosophical questions.

Onderwijsvorm
Lectures, workgroups, assignments

Toetsvorm
Essay and active participation

Doelgroep
Compulsory course for master students in Lifestyle and Chronic Disorders

Evidence Based Practice II: Implementing Evidence

Voertaal Engels
Faculteit Fac. der Aard- en Levenswetenschappen
Coördinator dr. M.J.P.A. Janssens
Docent(en) dr. M.J.P.A. Janssens
Lesmethode(n) Hoorcollege

Doel vak
To gain knowledge on the methods of guideline development and methods of implementation research. At the end of the course, students should be able to design and conduct implementation studies and critically appraise clinical guidelines.

Inhoud vak
The course will include the following topics:
- Translating evidence into clinically relevant recommendations
- Involvement of stakeholders
- Qualitative research methods
Evidence based practise 1: generating evidence

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Doel vak
To gain knowledge on the principles of evidence based practice and the design and statistical methods of studies generating evidence on prognostic factors, adverse events, and effectiveness of preventive and therapeutic interventions. At the end of the course, students should be able to design, conduct and critically appraise studies on these topics.

Inhoud vak
The course will include the following topics:
- Principles of evidence based practice
- Design and conduct of observational studies
- Design and conduct of randomized controlled trials
- Design and conduct of systematic reviews
- Internal validity and bias
- Critical appraisal of observational studies, RCTs and systematic reviews
- Cochrane Collaboration

Onderwijsvorm
Lectures, workgroups, assignments

Toetsvorm
Written exam

Literatuur
Syllabus including relevant articles

First Internship LCD
Doel vak
The objective of this internship is that students learn to prepare, design and conduct (more or less independently) a confined thematic research project and to write a scientific report thereof at the academic Master's level which has the potential to be submitted to a peer reviewed international scientific journal. In all components of this internship, that is, in designing the study, the practical conduct and writing the student should demonstrate his or her:
- advanced knowledge and understanding of the field, thus providing a basis or opportunity for originality of the scientific study;
- problem solving abilities in new or unfamiliar environments within broader contexts;
- ability to integrate knowledge and to handle complexity;
- ability to clearly communicate conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences.

Inhoud vak
The content of the internship depends largely of the specific research project. But in any case this should include a literature study, formulate a specific research question, design the most appropriate study, collect data, analyse the data and writing a report. Additionally the there should be an oral presentation.

Onderwijsvorm
Individual research under supervision, including writing a scientific paper thereof.

Toetsvorm
The final assessment work placement/internship and thesis is established according to the assessment form. This form can be downloaded from the students' web page (is part of the document including the approval and agreement form). The report should follow the outline of a scientific paper which has the potential to be submitted to a peer reviewed international scientific journal. Also the oral presentation is part of the assessment. In order to have the mark registered by the study secretary, the student should hand in one copy of the thesis and an evaluation form, to the study secretariat.

Vereiste voorkennis
Prior to participating in any work placement/internship and thesis, both student and faculty staff member involved should fill out a written application and agreement form. This form (for traineeships, internships, research projects) can be downloaded from the students' web page. The form concerns details on supervision, amount of time to be invested, allotted study credits, safety regulations, etc. The application and agreement form should include a description of the project. The forms have to be handed in at the coordinator of the master...
program. The master coordinator approves or rejects the projects on behalf of the examination board.

**Overige informatie**
Internships AM_471101 and AM_471102 are identical; both 30 EC.

**Internship LCD**

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<td>Coördinator</td>
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**Doel vak**
The objective of this internship is that students learn to prepare, design and conduct (more or less independently) a confined thematic research project and to write a scientific report thereof at the academic Master's level which has the potential to be submitted to a peer reviewed international scientific journal. In all components of this internship, that is, in designing the study, the practical conduct and writing the student should demonstrate his or her:
- advanced knowledge and understanding of the field, thus providing a basis or opportunity for originality of the scientific study;
- problem solving abilities in new or unfamiliar environments within broader contexts;
- ability to integrate knowledge and to handle complexity;
- ability to clearly communicate conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences.

**Inhoud vak**
The content of the internship depends largely of the specific research project. But in any case this should include a literature study, formulate a specific research question, design the most appropriate study, collect data, analyse the data and writing a report. Additionally there should be an oral presentation.

**Onderwijsvorm**
Individual research under supervision, including writing a scientific paper thereof.

**Toetsvorm**
The final assessment work placement/internship and thesis is established according to the assessment form. This form can be downloaded from the students' web page (is part of the document including the approval and agreement form). The report should follow the outline of a scientific paper which has the potential to be submitted to a peer reviewed international scientific journal. Also the oral presentation is part of the assessment. In order to have the mark registered by the study secretariat, the student should hand in an evaluation form and an electronic copy of the thesis (via Blackboard) to the programme secretariat.
Vereiste voorkennis
Prior to participating in any work placement/internship and thesis, both student and faculty staff member involved should fill out a written application and agreement form. This form (for traineeships, internships, research projects) can be downloaded from the students’ web page. The form concerns details on supervision, amount of time to be invested, allotted study credits, safety regulations, etc. The application and agreement form should include a description of the project. The forms have to be handed in at the coordinator of the master program. The master coordinator approves or rejects the projects on behalf of the Examination Board.

Scientific Writing in English

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Doel vak
The aim of this course is to provide the writing student with the essential linguistic means for producing English academic texts which are effective, idiomatically and stylistically appropriate and grammatically correct.

Inhoud vak
The initial focus in the course lies on the form of scientific texts in the Earth and Life Sciences:
- Abstract (or summary)
- Introduction
- Methods
- Results
- Discussion
General course outline
Introducing the topics:
- Academic and technical writing in English
- The characteristics of different kinds of scientific texts
- How scientific writing is judged and assessed
- Where do you find your information and how do you present it?
- How to avoid committing plagiarism
- Who am I writing for? What do I want to say?
Your readership
Key parts of an academic article: title, abstract, introduction, methods, results and discussion
Writing the actual article
Paragraph and sentence construction: how do I link paragraphs together?
Writing simple and complex sentences. Active and passive sentences.
Argumentation: how do I put an argument? How do I frame my own
opinion?
Should I use "I" or "we"?
Writing correct English
Use of apostrophes and colons
Word order, verb tenses, time and tense
Avoiding mistakes typically made by Dutch writers
Common spelling mistakes
You will be making considerable use of peer assessment: examining fellow students' written work and giving them feedback. This method provides useful insights into how a text might be improved. The process of providing someone else with feedback on their text is something that you will find very instructive.

Onderwijsvorm
The course is focused on self-tuition. The plenary sessions concentrate on the process of writing and the product of writing. Homework is part of the course (6-8 hours per session). With each topic, participants work through a phased series of exercises that usually conclude with the requirement to write a short piece of text. The instructor will append extensive written remarks to this text.

Toetsvorm
Students will receive their credits only when they have participated in the classes and also when they have handed in all of the assignments satisfactorily. Students will receive a 'pass' when they have finished the course, or a 'fail' if they don't.

Literatuur
Last year's reader will not be used anymore! (this update: August 28, 2012)

Doelgroep
This course is only open to students of specific two-year Master's programmes of the Faculty Earth and Life Sciences (see list of programmes above).

Overige informatie
- To do well, students are required to attend all lessons. Group schedules to be found at rooster.vu.nl and Blackboard;
- A VUnet registration for this course automatically gives access to the corresponding Blackboard site. Group registration only takes place via Blackboard (general groups: registration by students following FALW programmes containing this course, groups assigned to specific studies: registration via programme and course coordinator);

As for the general groups: unfortunately, course overlap is possible. You'll have to try, possibly with fellow students, to arrange a little schedule bending with either course co-ordinator. No guarantees though.

Please note:
- if you have registered for a group in Blackboard, you are expected to take part in all eight meetings. If you do withdraw, do that in time, both on Blackboard and in VUnet. This all will avoid a "fail" on your grade list for not taking part in this course, and allows other students to fill in a possible very wanted group spot.
In case of specific Blackboard matters concerning this course you can
Second Internship LCD

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Doel vak
The objective of this internship is that students learn to prepare, design and conduct (more or less independently) a confined thematic research project and to write a scientific report thereof at the academic Master's level which has the potential to be submitted to a peer reviewed international scientific journal. In all components of this internship, that is, in designing the study, the practical conduct and writing the student should demonstrate his or her:
- advanced knowledge and understanding of the field, thus providing a basis or opportunity for originality of the scientific study;
- problem solving abilities in new or unfamiliar environments within broader contexts;
- ability to integrate knowledge and to handle complexity;
- ability to clearly communicate conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences.

Inhoud vak
The content of the internship depends largely of the specific research project. But in any case this should include a literature study, formulate a specific research question, design the most appropriate study, collect data, analyse the data and writing a report. Additionally the there should be an oral presentation.

Onderwijsvorm
Individual research under supervision, including writing a scientific paper thereof.

Toetsvorm
The final assessment work placement/internship and thesis is established according to the assessment form. This form can be downloaded from the students' web page (is part of the document including the approval and agreement form). The report should follow the outline of a scientific paper which has the potential to be submitted to a peer reviewed international scientific journal. Also the oral presentation is part of the assessment. In order to have the mark registered by the study secretary, the student should hand in one copy of the thesis and an evaluation form, to the study secretariat.

Vereiste voorkennis
Prior to participating in any work placement/internship and thesis, both student and faculty staff member involved should fill out a written application and agreement form. This form (for traineeships, internships, research projects) can be downloaded from the students' web
page. The form concerns details on supervision, amount of time to be
invested, allotted study credits, safety regulations, etc. The
application and agreement form should include a description of the
project. The forms have to be handed in at the coordinator of the master
program. The master coordinator approves or rejects the projects on
behalf of the examination board.

Overige informatie
Internships AM_471101 and AM_471102 are identical; both 30 EC.

Writing a Research Grant Proposal

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<tr>
<td>Lesmethode(n)</td>
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Doel vak
The objective of this course for students is learning how to write a
research proposal, but also gaining insight in opportunities for
successfully submitting grant proposals in the Netherlands and Europe.

Inhoud vak
Students will gain knowledge of the opportunities for successfully
submitting grant proposals in the Netherlands and Europe. Topics to be
covered:
- grant agencies
- requirements for submitting a grant proposal
- increasing the success of submission
Various aspects of research proposals will be discussed and presented,
such as:
- Research question: should be unambiguous and specific.
- Societal relevance: motivation of the relevance of the research
  proposal; should be interesting and important.
- Methodological quality: study design should provide a valid answer to
  the research question.
- Literature: search for references that are used to support the
  research proposal should be systematic; references should be relevant.

Onderwijsvorm
- Presentations
- Self study
- Writing a grant proposal
- Supervision by teacher

Toetsvorm
Final research proposal plus oral presentation

Literatuur
Scientific papers related to the topic of the grant proposal
Vereiste voorkennis
Students of the 2- year research master Lifestyle and Chronic Disorders

Doelgroep
Students of the 2- year research master Lifestyle and Chronic Disorders

Overige informatie
Contact address: maurits.van.tulder@falw.vu.nl; room U-452 (W&N)