SELF-ASSESSMENT REPORT

of the

Department of Public Health
University of Tartu
Estonia

on the

Master of Public Health
and
Master of Sciences in Public Health
programmes

Draft version
September 2004
Preface

The academic staff of the Department of Public Health comprised of 13 persons at the time of preparing the PEER self-assessment report and everyone participated in the process. Thus it was decided that no special committee for preparing the self-assessment report should be established.

Starting from November 2003 all academic staff of the Department participated in bimonthly meetings, dedicated to the self-assessment. It was decided that each staff member should contribute to the writing and provide input for the self-assessment report. Thus each chapter of the report was assigned to 1 or 2 staff members (see list of staff involved in conducting self-assessment), who prepared preliminary drafts and presented these on meetings. All major issues were discussed and commented during the meetings. On the basis of all the information collected and opinions presented, this report was finalized and edited.

The exercise of preparing self-assessment report proved to be fruitful and served the purpose of being a well-structured audit.

The expectation of the staff of Department of Public Health from the current self-assessment is not only to get independent assessment and advice on the improvement of already existing training programmes on public health, but also guidelines and indications what steps should the Department take in the fast-changing European context in the future.

Statement confirming the accuracy of the report:

I hereby confirm that all information presented in this report is accurate and correct

Signature /prof Raul Kiivet/
Tartu, Date
List of staff involved in conducting self assessment

<table>
<thead>
<tr>
<th>Chapter / task</th>
<th>Name</th>
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<tr>
<td>1-2</td>
<td>Raul Kiivet</td>
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<td>3</td>
<td>Kersti Meiesaar</td>
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<td>Eda Merisalu</td>
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<td>Krista Fischer</td>
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<td>Kersti Pärna</td>
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<td>Ene Indermitte</td>
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<td>Liis Rooväli</td>
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<td>Anneli Uusküla</td>
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<td>9</td>
<td>Kaja Põlluste</td>
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<td>Editing and finalisation</td>
<td>Raul Kiivet</td>
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<td>Katrin Lang</td>
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Criteria/Standards

The criteria document prepared for the self-assessment served its purpose in guiding the self-assessment procedure.

With regard to the criteria being met by the programme, the situation differed, mainly at the level of each chapter. Most of the criteria as well as standards were met in Chapters 1, 2, 5, 6 (6.1), 7 and 8.

On the other hand, the criteria posed in Chapters 3, 4 and 9, were rather poorly met by the programme. In Chapter 6, the second part (6.2) of Educational Approach, was also rather poorly met. For Chapter 3 it can be said that the criteria were not met because the Department is not a separate organisational unit, but belongs to the Medical Faculty of the University of Tartu. The shortcomings of not meeting the criteria in Chapters 4 and 9 refer to the deficiencies of faculty (staff) and quality management. There is a common understanding among the staff that these are the most underdeveloped areas at the Department. Some of the ways forward to solve these issues are described in the respective chapters. It would be feasible to improve the situation within two to three years.
## Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>MPH</td>
<td>Master of Public Health</td>
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<tr>
<td>MScPH</td>
<td>Master of Science in Public Health</td>
</tr>
<tr>
<td>Department</td>
<td>Department of Public Health</td>
</tr>
<tr>
<td>Faculty</td>
<td>Faculty of Medicine</td>
</tr>
<tr>
<td>University</td>
<td>University of Tartu</td>
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Chapter 1: The development and the mission of the School of Public Health

University of Tartu and its Faculty of Medicine (founded by Swedish King Gustav II Adolph in 1632) has been the single institution in Estonia where students have been trained in medicine, dentistry, pharmacy and health, and where the respective research has been carried out. Thus, public health (formerly named hygiene) teaching and research has as long history as the University.

In Estonia, because of its small size and for historic reasons, there has never been an independent School of Public Health. The majority of training and research in this field has been carried out and coordinated by the staff of the Department of Public Health, University of Tartu.

1.1 Creation and history

Department of Hygiene was established at the University of Tartu in 1895 and since then systematic teaching, training and research activities in the field of public health started in Estonia.

In 1918, Estonia declared its independence and the national university in Tartu was opened in December 1919. Several prominent Estonian scientists returned from Soviet Russia and started working at the University of Tartu. Among them was Professor Alexander Rammul, who became head of the chair of hygiene and worked here for 20 years. His main areas of research were water, communal and food hygiene. He initiated and supervised an extensive medico-geographical (sanitary-topographical) study of Estonia, which comprised all counties of the country. The task was to describe the living conditions of people and other public health aspects and relate it to diseases and mortality. Attention was paid to housing, nutrition, drinking water, lifestyle, social activities, health status, prevalence of chronic and mental diseases, etc.

During the first decade after the II World War the academic staff of the Department changed frequently and research work came to an entire standstill. A revival in public health research was noticed from the end of 1950s when Professor Mihkel Kask was rehabilitated and returned to the chair. He played an outstanding role in the development of public health (particularly health promotion) in Estonia. Through his work he was aiming to achieve healthy individuals not suffering from illnesses. After the death of Professor Kask (1968) his work was continued under the supervision of his followers Associate Professor Malev Uibo (1968-1979) and Professor Arnold Jannus (1979-1990). Traditionally the research activities were mainly concentrated on local public health problems such as drinking water quality, the public water supply and sanitary protection of water resources, nutrition of pre-school children and their provision with vitamins, working conditions and the health of workers at some industrial enterprises.

During Soviet time, the public health services were provided by stations of sanitary-epidemiology, later called health protection services. The staff working in public health in Estonia had received a four to five year training in specialised institutions, called Institutes...
or Faculties of Sanitary-epidemiology either in St.Petersbourg, Moscow or elsewhere outside Estonia. Until year 1991, annually from 10 to 15 student positions at these institutions were filled by a separate call for students coming from Estonia.

Thus no professional training of public health was carried out in Estonia during the Soviet time (1940-1991) and the teaching and training activities of the Department of Hygiene were aimed at and limited to teaching of public health disciplines to the undergraduate students of medicine, dentistry and pharmacy.

1.2 Mission of the Department of Public Health

The present mission statement and objectives were elaborated by the staff of Department during the self-assessment period in 2003-2004 for preparation for the evaluation of research capacity and accreditation of the training programmes.

Mission statement, Department of Public Health

| To improve health and prevent disease in Estonian populations by acquiring, disseminating and applying public health knowledge |

Objectives of the Department of Public Health

1. To train and teach future professionals in public health through masters and doctoral programmes and residency training.
2. To contribute to training of medical professions.
3. To conduct basic and applied research for identification, analysis and intervention of health related problems of Estonian populations.
4. To achieve balance between teaching and research.
5. To provide service and consultancy in public health.
6. To encourage multidisciplinary and interdisciplinary approach.
7. To develop strong external relationships to public health practitioners and programmes in the community.
8. To strive for international co-operation in training and research.

The role of the Department as a single academic institution in Estonia in the field means that it has to cover all major issues of public health – determinants of health and disease and their prevention; promotion of health and organization and evaluation of health services. This can be done only in co-operation and networking at both national and international levels.

The aim of the MPH programme: to provide knowledge, skills and experience for expert decision-making, implementation of decisions, management and independent research and promotion in the fields of health care and public health.

1.3 History of recent reorganisation

After Estonia regained its independence in 1991 the Department of Hygiene was completely reorganised into the Department of Public Health. The importance of preventive medicine, including a population-based approach, was recognised. The proportion of public health subjects was doubled in the curriculum of medical students. At the same time, the numbers of the staff of the Department doubled as well.
Further changes were brought about in 1996 when, under the support of the World Bank Estonia Health Project new Chairs of Health Promotion, Epidemiology and Biostatistics and Health Economics were established in addition to the existing Chairs of Health Care Management and Environmental and Occupational Health. The Department also set about improving the qualifications of its staff by employing better-qualified staff and enabling a number of its members to complete their Masters in Public Health (6 persons) abroad.

On postgraduate level the first research programme of Master of Sciences in Public Health (MScPH) was established in 1998 and the first master thesis was defended in the year 2000. Throughout the 1990-s, discussions on establishing training for health professionals in preventive and/or public health medicine were going on, which were supported by the World Bank Estonia Health Project.

Up to the 1990s, the research at the Department was limited to studying environmental factors and lifestyle. During the recent ten years the area of research has expanded to other fields of public health such as epidemiology, health economics and health care management. Moreover, research in public health has become both interdisciplinary and international and the number of research projects, which are planned and performed with this perspective, has been constantly increasing (see Chapter 8). Three doctoral (Maarike Sallo, Eve Pihl and Kaire Innos) and 19 Master theses had been completed by September 2004. In addition, two reports about public health in Estonia have been published. Both national and international scientific conferences are organized regularly.

During 1997-1999 several working groups were established by the Ministry of Social Affairs to give advice on how to organize professional training of public health in Estonia. One of the major driving forces in these working groups was the Health Protection Inspectorate, which was running short of staff as no respective training was provided anywhere in Estonia. Finally, a development plan on public health education was presented and endorsed by the Ministry of Social Affairs. This plan proposed a 2-year Master of Public Health (MPH) programme as the main format of training of future specialists in the field of public health, and Department of Public Health, University of Tartu became the responsible institution for this training.

The curriculum of MPH was developed in close cooperation between the academics and professionals during 1999-2000. First group of ten MPH students started in September 2000 and graduated in 2002. This was the first time in the history that public health specialists were trained in Estonia.

In parallel to training of future specialists in the field of public health, the Department has taken active role in continuous education of the existing workforce in public health and health care services. In recent years several courses have been organized, some of these in English with international faculty and students from other Baltic countries in the BrimHealth framework (see Chapter 2.8).

1.4 Constituency

The Department of Public Health is a structural unit of the Faculty of Medicine. Neither the Department nor the Faculty are independent institutions, but both legally and financially belong to the University of Tartu. Thus all major academic, organisational and economical decisions influencing the training and research activities are done at the university level, and some at the Faculty of Medicine level. For example – professors are nominated by the
decision of the Council of the University and other teaching and training staff on the decisions of the Council of Faculty.

The Department has currently five Chairs:
- Epidemiology and Biostatistics;
- Health Promotion;
- Environmental and Occupational Health;
- Health Care Management;
- Health Economics

In addition, the Department also holds the Work Environment Laboratory as a structural unit.

Annex 1: Organisational chart showing the location of the Department and its component units

Staff of the Department will be described in Chapter 4.

1.5 Training programmes and courses

The Department is responsible for two Master programmes, for several obligatory and elective courses, offered to the students of the Faculty as well as for post-graduate students. The teaching load of public health disciplines to the future physicians and dentists totals 2600 hours of classroom teaching and accounts approximately 80% of the teaching workload of the staff.

The list of major training activities, carried out by the staff of the Department is as following:

a) Master of Sciences in Public Health (since 1999; 2-3 students annually) – full-time, two years, 120 ECTS credits, research-oriented, thesis accounts for ¾ of studies

b) Master of Public Health (since 2000; 7-15 students annually) – full-time, two years, 120 ECTS credits, professional training, thesis accounts for ¼ of studies

c) Specialist medical training (residency) in Occupational Health (5 trainees annually) – full-time, four years. The Department is the coordinating body for this programme and organizes teaching and training of Faculty of Medicine

d) Obligatory courses to the students of medicine and dentistry (200 students per course annually):
   - Medical Ethics, 1.5 ECTS credits;
   - Epidemiology and Biostatistics, 4.5 ECTS credits;
   - Health Promotion, 4.5 ECTS credits;
   - Environmental and Occupational Health, 4.5 ECTS credits;
   - Health Care Management and Health Economics, 6 ECTS credits

e) PhD students in medicine (25 students per course annually):
   - Modern Epidemiology, 4.5 ECTS credits;
   - Applied Biostatistics, 6 ECTS credits;
   - Bioethics, 3 ECTS credits
f) Elective courses to the students of Faculty of Medicine and to the students of other faculties of the University – annually 8-10 courses, in total for 200-300 students are organized and performed but the staff of the Department.

g) Continuous professional education in public health:
- BrimHealth courses

1.6 Budget

The funding of teaching and training activities of the universities in Estonia is covered by the Ministry of Education and Research according to the number of enrollees to each training programme. The number of enrollees is revised annually and fixed in a contract between the Ministry of Education and Research and each university. Whereas the budget for teaching and training does not change much between years, the funds and grants for research and development have to be applied annually in open competition with other researchers in the field of health and medicine.

Table 1. Budget of the Department 1998-2004

<table>
<thead>
<tr>
<th>Year</th>
<th>Undergraduate teaching</th>
<th>Master Programme</th>
<th>Research grants</th>
<th>Applied projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Euros</td>
<td>Euros</td>
<td>No</td>
<td>Euros</td>
</tr>
<tr>
<td>1998</td>
<td>163 300*</td>
<td>0</td>
<td>6</td>
<td>42 000</td>
</tr>
<tr>
<td>1999</td>
<td>172 000*</td>
<td>0</td>
<td>8</td>
<td>82 000</td>
</tr>
<tr>
<td>2000</td>
<td>131 300</td>
<td>1 400</td>
<td>8</td>
<td>86 000</td>
</tr>
<tr>
<td>2001</td>
<td>120 600</td>
<td>16 800</td>
<td>7</td>
<td>68 000</td>
</tr>
<tr>
<td>2002</td>
<td>129 300</td>
<td>14 700</td>
<td>8</td>
<td>83 300</td>
</tr>
<tr>
<td>2003</td>
<td>123 500</td>
<td>11 600</td>
<td>9</td>
<td>94 600</td>
</tr>
<tr>
<td>2004</td>
<td>135 200</td>
<td>17 200</td>
<td>6</td>
<td>96 000</td>
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* approximately 60% of budget was financed from the World Bank Estonia Health Project

As can be seen from Table 1, the budget, the proportion of funding dedicated to MPH programme is quite limited (equivalent to 1 full-time position) and the Department has to support this activity on the expense of other incomes. Thus in budgetary terms, there is no staff, solely dedicated to the training in MPH programme. In addition, it is the strategy of Department to involve professionals from the field of public health and from other disciplines to the training to guarantee practice-oriented teaching and to cover the deficit of competence of the limited staff of Department.

Within a context of constraints on public spending, the applied projects offer additional funding, which enables to guarantee the sustainability of the research programme of the Department as a first priority. Another benefit from the applied projects is that they provide an excellent opportunity for the master students to perform practice-related studies and collect data for their thesis.

1.7 Institution and programme Public Relations

Main communication about training programmes and learning possibilities is carried out centrally by the University of Tartu in advertisements and mailings and public relation campaigns. The targeted channel of communication on MPH programme is the web site of the Department (www.arth.med.ut.) and personal communications with the staff of Department as well, as with the MPH graduates and students.
Chapter 2: External environment

The initiative to start MPH programme at the University originated from the public health professionals, mainly working in the health protection services and in the Ministry of Social Affairs. Thus it has been most obvious, that the curriculum development as well as the implementation of training has been and will be performed in close cooperation with the public health professionals active in the field. As the MPH programme is quite young, it is too early to look for evidence about the impact of the programme on the (public) health services, but this is planned to be performed in the future.

2.1 The needs for professionals in Public Health

The needs for professionals in public health for Estonia has been assessed by the Ministry of Social Affairs in collaboration with the Health Protection Inspectorate and the University of Tartu during 1997-1999 and the respective policy document was endorsed in 2000.

The total number of public health professionals for Estonia has been estimated to be 900-1000 persons, including the professionals working in health protection services (environmental health), occupational health, health promotion and at various administrative positions at national, municipal and institutional levels. In long-term up to one-half of these should have master degrees, and thus the annual training need is approximately 20 graduates from MPH programme. Until now the number of students attending the MPH course has been less than one-half of the estimated need.

The policy document on public health training foresaw an additional track of training in environmental health and Tartu Medical School (which is a vocational training institution for nursing) to be the responsible institution for this training. Enrolment to the three-year programme of Specialist in Environmental Health at Tartu Medical School started in 2002 and is 15 students annually. The graduates are expected to find jobs mostly as junior officers in the national health protection services, but they are also eligible to continue in MPH programme.

2.2 The Ministry of Social Affairs

The relationship of the Department with the Ministry of Social Affairs, responsible for all health-related issues in Estonia, has been long-lasting and very close. At the beginning of 1990-s it was more of consultancy and personal participation of the staff of Department in various task forces and committees at the Ministry. Since then the participation in preparation of policy documents and performing applied research to support decision-making have become more important in this cooperation. Since the start of MPH programme, several of the students and graduates have been employed by the Ministry.

The attitude of the authorities towards training and teaching in public health is positive. For example in spring 2004, the Ministry organized a 4-day training session on basic principles of public health for all of its staff (45 persons) working on health issues.

List of contracts for applied research and consultancy is included in Annex 2.
Annex 2: List of the funded research projects in 2001-2004

2.3 Other Ministries

The Ministry of Education and Research is the funding agency of both training and research as well as responsible for formal quality control of these activities. In October 2003 a formal evaluation of research in all medical and health sciences was carried out in Estonia by international review teams. The overall quality of research and overall capability at the Department were judged to be good, which placed the Department among the best 25% of research units active in the fields of biomedical and health sciences.

Ministry of Environment is another partner, which seeks occasionally advice on the health consequences of public policies. Staff of the Department has participated in formulating the National Environmental Action Plan and the Department is also a partner in implementation of vocational training components of this plan.

2.4 Contribution to informed public debate in PH issues

Some of the staff of Department have been frequently presenting on national professional and/or public meetings on public health and health care issues, as well as writing articles to national newspapers and professional journals.

The medical community in Estonia is constantly introduced to public health issues via the Estonian scientific medical journal Eesti Arst (Estonian Doctor) by the staff of the Department.

2.5 Universities

Cooperation with other faculties within University and with public health professionals is essential for success in training in the MPH programme. Some courses of the MPH are carried out by lecturers from the Faculty of Physics and Chemistry, Faculty of Law and Faculty of Social Sciences. In addition, lecturers and tutors from other non-academic institutions (Ministry of Social Affairs, Health Insurance Fund etc.) with practical experience in different aspects are recruited to teach specific topics and for practical assignments.

The Work Environment Laboratory, established at the Department in 2003 is the basis for practical training for the students of environmental health from Tartu Medical School.

2.6 Health and Public Health Professionals and their associations

During the last five years the Department been the organizer of two annual national meetings – Conference of Health Promotion and Symposium on Occupational Health. Both 2-day meetings have succeeded in gathering all professionals active in these fields to present and discuss professional aspects of their work and to exchange experience.

There are approximately 10 non-governmental organizations in Estonia, whose members represent different professions related to, and interested in public health. In spring 2004, the
Department started an initiative, aimed to unite the following organisations in the Estonian Public Health Association:
- Estonian Society of Health Protection Workers
- Estonian College of Health Care Executives
- Estonian Health Promotion Union
- Society of Occupational Health Physicians
- Estonian Health Education Association
- Health Promoting Hospitals Network
- Healthy Cities Network
- Health Promoting Schools Network
- Injury Prevention and Safety Promotion Union
- Estonian Temperance Association

The overall aims of the Estonian Public Health Association are:
- To raise professional quality of public health professionals and practitioners through improved educational, developmental and practical collaboration supported by the national umbrella organisation in Estonia.
- To improve opportunities for and quality of continuous professional education and professional development programmes in the field of public health.
- To communicate between public health professionals from Estonia as well as with their colleagues in other European countries, i.e. through European Union of Public Health Associations.

2.8 European co-operation

For ten years – from 1993 to 2003 – a comprehensive project for the development of training in public health in the Baltic States (acronym BrimHealth) was carried out between the following partners:
- Nordic School of Public Health, Gothenburg;
- Kaunas Medical University, Faculty of Public Health;
- Riga Stradins University School of Public Health;
- Department of Public Health, University of Tartu.

At start, this cooperation, financed by the Nordic Council of Ministers and Open Society Institute, provided learning opportunities at the Nordic School for persons active in public health from the Baltic countries. During last five years, the training activities have been transferred to the Baltic countries and each of the SPH have organized at least one 2-week course (in English) annually with international faculty and students from all Baltic and Nordic countries.

The BrimHealth partnership offered the staff of the Department ample and unique opportunities to participate in courses with distinguished visiting teachers from other European countries and to gain practical teaching experience of students in international setting.

The framework of mainly vocational training is foreseen to continue in a somewhat different format, such as BalticHealthTrain, and financial support for this network has been awarded by European Union Public Health Programme in 2004.
Chapter 3: Internal organisational environment

3.1 The SPH: Director’s office and departments

Department of Public Health is a structural unit of the Faculty of Medicine, University of Tartu (see Chapter 1 and Annex 1). The Director (Head of the Department) is appointed among the professors of the Department by the Dean of the Faculty for a period of three years.

3.2 The units

Department of Public Health has five Chairs (see Annex 1):

- Chair of Environmental and Occupational Health
- Chair of Epidemiology and Biostatistics
- Chair of Health Promotion
- Chair of Health Care Management
- Chair of Health Economics

Because the Department is rather small, it has not been considered necessary to work out missions separately by the chairs. The mission (as quoted in Chapter 1.2), as well as objectives are common for all the chairs at the Department.

The Department holds also a recently established unit:

- Work Environment Laboratory

The Laboratory aims at development and performance of environmental measurement methods in different indoor environments. It also provides research possibilities and practice basis to students.

The number of staff at each chair and the Laboratory is described in Chapter 4 and presented in Annex 3.

The chairs do not have their own budgets, but are operating under the budget of the Department.

3.3 Task Forces and Sub-Committees

The Department has not established task forces or sub-committees. The Master programme is not managed by the educational committee. One of the reasons for not having an educational committee may be the fact that the number of staff is small, and regular meetings take place (as described in the next section).
3.4 Faculty

Meetings of the staff. The development of contents of courses in the Master curriculum is continuously improved and discussed among the teaching staff. The staff meets regularly (about once or twice a month) to discuss the content of different subjects, teaching and evaluation methods. The essential content of any course is compiled and developed by one person who is responsible for the course. Possible interactions and overlapping with other disciplines are discussed in regular meetings.

There was a change of co-ordinating body of Master programme in January 2003. A new technical coordinator was appointed. Also, the tasks of the coordinator were more clearly defined. Her responsibilities include developing timetables for active teaching (lectures and seminars), exchanging information between persons involved in Master’s programme, management of documentation concerning the Master programme, following the fulfilment of study plans of Master students.

One very important possibility for further development of curricula of Master programme and strategically plan the changes could be regular meeting of heads of chairs of the Department. Heads of chairs are leaders of specific topics, but their responsibilities also include perspective planning of Master programme in the nearest 5 to 10 years. The recommendable density of these meetings would be once per month. In those meetings all strategical decisions will be prepared and presented to general meeting of teaching staff of the Department for further discussion and approval.

Pedagogical approach of the teaching staff. One of the shortcomings in teaching the Master students is the lack of formal organisation ensuring a coherent pedagogical approach of the teaching staff.
4. Teaching staff

4.1 Faculty characteristics

4.1.1 Faculty size, composition and quality

The Department consists of 25 persons, including 9 teaching positions (1 professor, 4 associate professors, and 4 senior assistants), 4 research positions (incl. 2 extraordinary), 6 administrative and 5 technical positions.

Annex 3: Academic, scientific and administrative staff of the Department

The number of researchers and senior researchers depends on the amount of the target research and grant funding. One professor retired and was nominated the status of professor emeritus in 2003. She continues supervision of current doctoral and master projects.

One associate professor (Maarike Harro) was appointed director of newly established National Institute of Health Development in July 2003, but she also continues her research activities and supervision of doctoral and Master students at the Department, University of Tartu. The Department has one guest professor, Mati Rahu, who is working as head of Department of Epidemiology and Biostatistics in National Institute of Health Development. He is mainly teaching and supervising doctoral and master students, but is also involved in collaborative research projects.

The there are 13 female and 2 male teaching staff members, with an average age of 44.8 years at the Department. The programme provides equitable opportunities without regard to age, sex, race, disability, nationality and religion.

Six persons (average age 43.2 years) are working as administrative staff and 5 persons (in average age 31.6 years) are working in the Work Environment Laboratory.

The staff of the Department has high quality professional skills. All the teaching staff has academic degrees. Two members of the teaching staff are at the final stage of their PhD studies abroad: one at the London School of Hygiene and Tropical Medicine (epidemiology) and one at the University of Helsinki (public health).

The curriculum vitae’s of the teaching staff are provided in Annex 4.

Annex 4: Curriculum vitae’s of the teaching staff

The teaching staff has good pedagogical skills and public health experience. Each year they participate in the international meetings, conferences and training courses (see Annex 5). Most teachers and researchers participated in the course - training of trainers, a part of OSI/ASPHER programmes in 2003.


The teaching staff has good supervision and advisory practice. Most of staff members act as project leaders and experts in the projects of Ministry of Social Affairs and abroad (see
Annex 2 for funded projects). Also, they participate as experts in the local, national and international committees.

About 2/3 of teaching hours are covered by the Department staff and about 1/3 of teaching hours are covered by the lectors from outside the University, most of whom hold PhD or MPH degrees. The following is a list of institutions and specialists teaching from outside the Department.

- National Institute of Health Development – professor and other research staff of epidemiology; director of the institute – health promotion;
- Estonian Health Protection Service – leading specialists of environmental health and infectious diseases;
- Ministry of Social Affairs – heads of the departments and leading specialists;
- Estonian Health Insurance Office – top managers, members of board.

4.1.2 Faculty workload

At the beginning of each academic year the teaching and researcher staff compose a work plan, where teaching hours, research activities and tutoring are included.

The workload between the chairs and persons is unbalanced in terms of its components. Namely, some teaching staff is more involved in undergraduate teaching (this is the main workload for the teaching staff) than the others.

At the same time, the share of administration and consultation duties, supervision of students and preparation of teaching aids is also different in the workload of the staff members. There does not exist a written policy about counselling hours, and this is seen as a problem.

Time allocated for research activities varies between academic staff members (see Chapter 8 for research).

Within the Department the workload is balanced as is seen from the overall performance of the Department.

The workload of the Department as a whole allows participants of the MPH program sufficient access to staff for tutoring and counselling. This was reflected in the student feedback questionnaires (see Chapter 5 for the results of feedback questionnaire).

4.2 Faculty development

Development of the faculty will be achieved by the following initiatives. First of all, to enhance the competence of staff by developing perspective plan for future courses, involving additional competent staff in the teaching activities of the Department, and organizing training for the staff in pedagogical methods. Secondly, to improve the work organization at the Department by enhancing scientific discussion by systematic scientific conferences and meetings to overcome isolation and achieve teamwork, also by extend teamwork into thesis supervision and developing a long-term working plan for the Department. The third initiative would involve future staff selection and training through MPH and PhD programmes.
4.2.1 Recruitment, appointment and promotion of faculty

Statutes of Professional Degrees adopted by the Council of the University are fixed official requirements to professional degrees. This is adopted by the Council of the University of Tartu Regulation no. 15 of 22 December 2000 and amended by the Council of the University of Tartu Regulation no. 18 of 01 June 2001. Statute of Professional Degrees is adopted of clause 14 (3) 13) of the Universities Act and clause 10 of Article 10 and clause 91 of the Statutes of the University of Tartu.

The standards of quality for recruiting teaching staff are common for the whole University, and the Department has to follow these requirements. All teaching staff is elected and depending on the position the teachers hold their post since three until five years. There are two basic criteria for the teaching staff – research and teaching experience. The candidates will be evaluated in respect of their competence in research and development activities as well as their teaching, teaching methods and study aids. If the position applied for is one entailing administrative duties and requiring experience, the candidates will be evaluated regarding these too.

Lecturers, assistants, research fellows and associate professors are elected and appointed by the Council of Faculty, professors by the Council of the University.

Annex 6: Eligibility requirements for academic staff at the University of Tartu

According to Professional requirements and job description for academic staff of University of Tartu the most important part of professional requirements of academic staff (teachers and scientists) is scientific work and development activities. In this area the first priority is given to publication peer-reviewed scientific papers presented in international high-accepted (cited in several international databases) papers and success in getting money from several foundations for scientific research.

In the field of teaching of the students the first priority is given to the number of hours of lectures and seminars. According to Professional requirements professor must have 128 academic hours, associated professor 224, senior lecturer 288 and assistant 320 academic hours per study year (approximately 31 study-weeks).

4.2.2 Staff development

There is no systematic plan for faculty development. Training of the staff is not wholly coordinated and planned according to the needs of curriculum. It rather depends on available resources and personal interest and preferences. There is an urgent need for the plan of continuous staff training.

The staff development would benefit from staff members working abroad for a limited time. This has been going to a certain extent, with some staff members having done their MPH degrees abroad, having been on short-time scholarships, and doing their PhD’s abroad.

In 2003 majority of the staff participated in the course training of trainers (the list of participants included at the end of Annex 5). This was a part of OSI/ASPHER project.

With the support of OSI/ASPHER programme two courses are planned in 2004: curricula development and management change.
4.2.3 Faculty management /policy

The staff of the Department feels that the issues of resource planning are not well communicated to them. There is no clear Department resource planning process. There is much debate among the staff members about the Department culture, workloads, etc. It is expressed by the staff members that “transparency and teamwork should be achieved in the future”. Therefore, a well-formulated policy on faculty management should be worked out.

4.2.4 Faculty evaluation

Periodic Department performance evaluation is regulated by the rules of the University and takes place in the form of annual reports by each staff member. These are submitted to the Head of the Department and are forwarded to the Faculty. The results of these reports could be used more to implement changes in the management of the Department.

Faculty evaluation by ASPHER took place in 1999.

In May 2004 the current MPH and MScPH programmes were provisionally accredited by the Estonian Ministry of Education and Research (see Chapter 9).
Chapter 5: Students and graduates

5.1 Recruitment and admission policy

General information concerning study for MPH at the University of Tartu is continuously available on the web-site of the University (www.ut.ee). The same information is also available in printed version and is revised and reprinted annually. An announcement in the main Estonian newspapers is issued as the deadline for application is approaching. More detailed information about studies for master degree on public health is available on the web-site of the Department (http://biomedicum.ut.ee/arth).

The MPH programme is financed by state and is free for the students. Because of relatively small number of students, only one specialty per year is operating, e.g. in the year 2001, 2002 and 2003 health protection, in 2000 and 2004 health care management. The specialty and exact number of students is decided in cooperation with Ministry of Social Affairs on the basis of need for certain type of specialists.

Admission to the Master programme is conducted on the basis of a competition held for persons who have completed the bachelor's programme in social sciences, economics, biology, sports and exercise or any other closely related specialty or who have completed the bachelor's programme at the Faculty of Medicine. The competition consists of writing of an essay on the topic in the field of public health an applicant plans to study.

There is no restrictions to applicants regarding their age, religion, race etc. The only requirement is sufficient academic background and language proficiency as the studies are performed in Estonian language only. There is a Russian minority in Estonia, but as the official language is Estonian, they have to master it for gaining citizenship.

Currently, the MPH programme is run as a part-time programme. Part-time learning is the only opportunity because most of the students are studying while continuing their regular work.

5.2 Coherence between admission and selection policies and the mission statement of the SPH

The admission and selection policies generally accord to the mission statement of the Department. Admission policies also allow to admit students with relatively diverse background. First criterion is to have a bachelor’s degree. Medical or related education would be an advantage, however, other field of education is not considered as disadvantage. Second criterion is the existence of a well planned study project. Presence of a motivated tutor is a guarantee of the success and is considered as an important prerequisite for admission. Third criterion is language proficiency because the programme is run in the Estonian language. Also, knowledge in English language should be sufficient as long as there are many study materials (textbooks, scientific literature) available in English only.

5.3 Student guidance to the studies

There is currently no student handbook about the studies at the Department. However, there are several resources that cover relevant issues, such as:
- General written study guides of Tartu University
- Similar information in the University web-pages (www.ut.ee)
- Specific information on web pages of Faculty of Medicine (www.med.ut.ee)
- More specific information on web pages of the Department (http://biomedicum.ut.ee/arth)

There is a project coordinator at the Department who is responsible for contacting both students and teachers in order to guarantee fluent run of the MPH programme. The coordinator provides help that concerns study at Department, such as location and time of the lectures/seminars, how to access local libraries and computer/internet services; etc.

Every student has a supervisor whose main task is to help the completion of the MPH thesis. Access to specialists (e.g. statistician and some other) is usually arranged by supervisors.

The curricula as well as timetables for every subject are available for every student. If changes in timetables occur, the students are immediately informed by the coordinator.

There are no textbooks available in the Estonian language. Therefore two principles are adopted: first, every teacher tries to give as detailed notes of their lectures as possible; and secondly, the Department tries continuously to update the collection of textbooks in English and these are always available to the MPH students.

5.3 Student guidance to the career possibilities

Good contacts with Ministry of Social Affairs, Health Insurance Fund, Health Protection Board and some other institutions enables to share information about needs and vacancies of positions suitable for graduates. The Ministry of Social Affairs is one of the most interested in getting well educated specialists. Hence there have been several places for MPH students financed by the Ministry; it is obvious that these places are filled with applicants who will find or continue their work in the same institution.

5.4 Students involvement in the decision making process

The opportunity to get involved in the decision making process is limited for the students. Main reason for this is the general structure of the MPH programme: the students are rather busy with their daily job and their visits to the Department are very episodic regardless regularity. The students live and work at different locations all over the Estonia and their contacts with each-other are limited, too.

The Department plans to organize a conference on MPH programme in 2005 where the students and graduates are welcome in addition to current teachers and their colleagues from other institutions and from abroad.

5.5 Effectiveness of the programme with respect to average length of study and number of graduates

The following tables present the quantitative data of the MPH programme at the Department.
Table 2. Numbers of applied and admitted students for MPH programme 2000-2003

<table>
<thead>
<tr>
<th>Year</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of applicants</td>
<td>16</td>
<td>9</td>
<td>16</td>
<td>20</td>
<td>61</td>
</tr>
<tr>
<td>Number admitted</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>10</td>
<td>34</td>
</tr>
<tr>
<td>Applicants per place</td>
<td>1.6</td>
<td>1.3</td>
<td>2.3</td>
<td>2</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Table 3. Performance of the students by track and year of admission

<table>
<thead>
<tr>
<th>Year of admission</th>
<th>Specialty</th>
<th>Number of admitted students</th>
<th>Finished studies successfully in time</th>
<th>Ceased studies temporarily</th>
<th>Failed the programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>Health care management</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>2001</td>
<td>Health Protection</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>2002</td>
<td>Health Protection</td>
<td>7</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Health Protection</td>
<td>10</td>
<td>Deadline 31.08.2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Because the numbers of students admitted each year are small, it is difficult to make reliable statistics on the average length of study. Comparing between admission years 2000 and 2001-2002, it is seen from Table 3 that the number of students who finished studies successfully in time has increased considerably.

The Department has and maintains the databases of students, graduates, and dropouts. The students who have dropped out of the programme or are not making sufficient progress are contacted and encouraged to continue their studies. The response received from the drop out students regarding their studies is that the reasons are not the loss of motivation, but rather to do with economic situation (having to dedicate more time to work).

5.6 Monitoring of the graduates population and use of their experience

There are good contacts with graduates and some of them are invited to participate in teaching process.

Feedback of master students - quality of Master of Public Health Programme

In order to improve and develop the quality of teaching, the opinion of Master students as well as teaching staff is very important.

In 2003 a questionnaire was developed to assess the satisfaction of graduate students with their studies. The aim of the questionnaire was to get information about the opinions about Master as well as occupational activities after graduating MPH after some experience at workplaces.

Annex 7: MPH graduate feedback questionnaire

In January 2004 the questionnaire was sent by e-mail to all students who had completed the MPH curriculum. After completion of the questionnaire an interview was carried out with all
respondents to get more specific information and to discuss about the further improvement of Master programme.

The questionnaire was sent to 10 persons: 4 persons had started Master program in 2000 and 6 students started studies in 2001. One respondent defended her master thesis in 2002 and 6 respondents in 2003. 3 students had completed the courses in the curriculum but not defended Master thesis yet. With respect to tracks, 9 students had completed their studies in specialisation in environmental health and 1 student in health care management.

All 10 persons answered the questionnaire and had an interview with the coordinator of the programme. 9 respondents were female and 1 male. The average age in starting Master studies was 39 years. The mean working experience was 16 years. 9 respondents had previous education in medicine (5 of them graduated Medical institutes in Moscow or St. Petersburg in the speciality of hygiene or epidemiology). 7 persons were working in Health Protection Services of Estonia.

All respondents were working during Master studies (only 2 had part-time jobs). 8 respondents found that working at the same time made studies complicated and they had sometimes difficulties in timely completion of learning tasks. There was not enough time to read all necessary learning materials or books. Most of the respondents did not have problems in their workplaces during Master studies and had the permission to be absent at work during study periods (about 4 to 6 working days in a month). One person reported that she had problems managing her work tasks. The persons working in Health Protection Services reported that sometimes the work in the named institution was impeded as many persons were absent at the same time and the employer had difficulties to organise work.

The main reason to start studies was the wish to improve knowledge in the field of public health and get new information. It was mentioned many times that the students were feeling lack of competence and there were no possibilities to get the education in the field of public health anywhere else in Estonia. Three respondents had got the recommendations to start studies from their workplace.

The general opinion about different aspects of Master studies was good. The knowledge of teaching staff about modern theories was evaluated very highly as well as the teaching skills of lecturers and the supervision of Master thesis. The balance between active learning and independent work was evaluated to be good. Students reported that independent work (seminar works and essays) was very useful and they would have liked to have more time for reading, but because of work it was complicated. The balance between different subjects was evaluated somewhat lower, but the opinions of changing the balance were very different and depended on the persons’ special interests. The teaching of practical skills was evaluated not so good, but it was not considered to be so important either. Nevertheless, in some courses, the importance of learning practical skills was of more importance to students (Risk assessment, Epidemiology and Biostatistics). The previous curriculum included also Practical Assignment, in which students were taking part in the work of different institutions of health care system, Health Protection Services and Ministries. The organisation of work within Practical Assignment was evaluated low. Main reasons were the ambiguity of tasks between the Department, different institutions and students, as well as poor communication. At the same time the importance of practical work was evaluated very high. The respondents mentioned that they had the possibility to get familiar with the health care system and operation and tasks of institutions and established good contacts with specialists. The students who were working in Health Protection Services did not evaluate it very useful as the cooperation between different institutions is their everyday practice. Practical Assignment course is missing in the new curriculum and as most of the future students are coming outside the health care system, it is very important to include practical work and introductory visits of different institutions into other subjects.
The quality of teaching was evaluated very highly in *Foundations of Public Health, Environmental and Occupational Health* and *Epidemiology and Biostatistics*. The lowest score was given to *Practical Assignment* and *Legislation in Estonia and in EU*. At the same time the importance of *Legislation in Estonia and in EU* course in their current job was evaluated high as well as importance of *Foundations of Public Health, Epidemiology and Biostatistics* and *Biological Factors in the Environment*. The students did not consider *Health Sociology* to be important in their current job. There was also some dissatisfaction about the teaching of the course. Main reasons were weak interactions with real life and the course being too theoretical and unclear. There is not enough data about the specific courses in the track of health care management specialty because only one student has graduated by now.

The students reported that most important and interesting courses were *Epidemiology and Biostatistics* (reported in 7 cases), *Principles and Methodology of Risk Analysis* (3), *Environmental and Occupational Health* (3) and *Legislation in Estonia and in EU* (3). Less important course was *Health Sociology* (reported in 6 cases).

The missing or not sufficient courses were *Epidemiology and Biostatistics* and *Planning of Research Project*. Although these courses are well represented in the curriculum the students feel that they need more time and practical exercises in these subjects as this is closely connected with their master thesis as well as with future jobs. Other subjects mentioned to be included in the curriculum were: Microbiology, Food safety and Nutrition, Budgeting and Principles of Management.

Most students reported that they had a lack of time for working with their Master thesis and that they need more time during last semester for compiling of master thesis. All students used the opportunity to take study-leave from work (their average salary maintained for 10 days), but most of them had to take also paid or unpaid leave from work to complete their thesis. By now the Department has tried to organise most of the courses during first 3 semesters in order to give students more free time to write their thesis.

The students were very satisfied with learning environment. The availability of teaching materials and possibilities of copying were sufficient. The choice of literature in the library was evaluated good and relevant for learning purposes. Although there is no special learning room or computer places for Master students, the students found the library to be very good for independent learning and they had always access to computer if needed (in agreement with staff members). All students had personal computers at workplaces and some students at them home. The availability of teachers for consultation was evaluated very good and there was no need for official consultation time. The availability and exchange of information about courses and organisation of studies was considered to be good. At the start of Master programme the information about courses and learning days was not very regular which made the planning of workload complicated. All students mentioned that as for the organisational level, the Master studies have improved a great deal during two years.

The accommodation was organised independently by students. Most of the students were staying with their relatives or friends during study periods. The possibilities to stay at the University dormitory was considered to be comfortable and with reasonable price.

All students found their Master studies to be very useful for personal development and for their job. The MPH increased their self-reliance and self-realisation. Five persons had an increase in salary after graduation and three persons had an improvement in a career or had the confidence to change for better job. All respondents would recommend master studies to others, but three of them would undertake these studies when having to decide again. The main reason is the difficulties to make master studies congruous with working at the same time.
Summary of the feedback questionnaire

The feedback from students was mostly positive. Most of the students mentioned that there have been many improvements in organisation and quality of studies during the two years operation of Master program.

**Strong sides**

- Learning facilities are very good and relevant for Master program. Main teaching is concentrated at the Department and there are good and sufficient technical and audio-visual aids.
- The Department’s library has a good choice of literature that covers most needs for master courses and thesis preparation.
- Most courses are considered relevant and important for future jobs.
- The balance between active learning and independent work has achieved a very good level in most of the courses.
- Knowledge of modern theories and the teaching skills of lecturers are evaluated very high.
- The availability of teachers for consultation and teaching information is good and there is lot of personal communication between students and teachers. The attitude of staff is friendly and supportive.
- The regular study periods (2-3 days-cycle twice a month) is most suitable for both working and non-working students.
- Master studies in public health give better career possibilities or salary for students.

**Weak sides**

- Many students are working parallel with Master studies, which takes much effort from students and makes the completion of either learning or job tasks a challenge.
- New curriculum does not include the course *Practical assignment* and there is a need to integrate fieldwork (or introductory visits to different institutions) into other courses.
- The balance of practical learning and independent work is not relevant in courses *Epidemiology and Biostatistics* and *Planning of Research Project*. Students need more practical exercises and more information about these subjects. The course content of *Health Sociology* needs to be revised in order to have more clear objectives and better outcome.
- The students do not have enough time to complete their Master thesis because they are working at the same time. Most of the students have to take special study-leave or holidays from work to write up their thesis.
- The use of teaching rooms is very tight and there is a need for more space. Although all students have good access to computer at their workplaces or homes, there is no special computer at the Department where Master students can use Internet or work during their stay at the Department.
- A regular feedback system about different Master courses completed at the Department is still missing. It should be implemented in the nearest future as it would help to develop and improve the content of courses.
Chapter 6: Training programmes

6.1 Curriculum of Master of Public Health and Curriculum of Master of Science of Public Health

a) Curriculum of Master of Public Health (MPH)

The aim of the Master's programme is to provide knowledge, skills and experience for expert decision-making, implementation of decisions, management and independent research and development work in the fields of health care and public health.

Master of Public Health has been operating since 2000 and is a full-time, two years (120 ECTS credits) programme oriented to professional training, where independent project work and thesis account for ¼ of studies. The current curriculum of MPH was introduced in 2002 and the main difference from the previous one (from 2000) is that currently no practical assignment is included in academic curricula. Instead, more emphasis is paid to core disciplines in public health.

Because of relatively small number of students, it is possible to open only one track per year. In years 2001, 2002 and 2003 it was environmental health (health protection). In the year 2000 it was and in the year 2004 it is health care management. This is decided in cooperation with Ministry of Social Affairs on the basis of need for certain type of specialists.

The tradition of the best European schools of public health is followed, to make sure that the education is internationally acceptable and meets European and international standards.

The MPH degree corresponds to 80 credits: postgraduate training in public health – 60 credits, including core and special modules and independent research work and writing the MPH-thesis – 20 credits. The core modules (32 credits) are obligatory for all MPH students. One of the two special modules (24 credits) will be chosen according to the student’s preference. The training takes in total the equivalent of two years full-time study, the thesis is defended at a public disputation.

At the University of Tartu, one credit equals one study week, or 40 student study hours. At the postgraduate level one credit usually includes up to 10 direct teaching hours and 30 hours of individual studies. This principle is followed in the MPH and MScPH programmes.

b) Curriculum of Master of Science in Public Health (MScPH)

The aim of the MScPH programme is to provide knowledge and skills for conducting independent research work in the field of public health and for the profession of a specialist of public health.

There are five tracks where the student can conduct individual research and give a specialty exam: Epidemiology and biostatistics, health sociology, environmental and occupational health, health care management, health economics.

Since only about 3 MScPH students are admitted each year, there are no separate lecture courses given for the MScPH students. They follow selected courses in the MPH programme.
and for some courses there are separate home assignments (mostly home reading) foreseen for MScPH students.

6.1.1 Coverage of relevant areas of public health

a) Layout of the Curriculum of Master of Public Health:

The MPH degree corresponds to 80 credits. The curriculum consists of core modules (32 credits, 40% of the total workload and final evaluation), special modules (24 credits, 30%) and elective courses (4 credits, 5%). The Master thesis accounts for 20 credits i.e. 25% of the total workload.

Annex 8: Curriculum of Master of Public Health

The core module (32 credits) contains basic courses:
- Foundations of public health (5 credits);
- Human physiology and ecology (5 credits);
- Epidemiology and biostatistics (5 credits);
- Health sociology (5 credits);
- Environmental and occupational health (5 credits);
- Research design (4 credits);
- Presentation of research results (3 credits).

The core module should prepare the students with the necessary background to be able to follow more specialized courses and complete their master thesis. At the same time the core module gives an overview of main areas of public health.

The course of foundations of public health provides definitions of health as used in the public health research and practice, the main principles of health promotion and the developments of these concepts over time. Also the main determinants of health are discussed – both, environmental and societal factors. The contents of this course vary from year to year, depending of the track chosen by the students of that given year. At present, since the only possible track has been environmental health, the course is mainly focused on health economics and management - these subjects do not form parts of the core and special module as separate courses.

The course of epidemiology and biostatistics provides basic knowledge of descriptive epidemiology and basic statistics, needed for assessing health interventions. This includes basic principles of data presentation and analysis, the types and basic design issues of epidemiological studies, points for critical reading of health-oriented scientific publications. During theoretical and practical sessions, students are expected to obtain elementary knowledge of statistics and epidemiology needed for independent research in the field of public health.

During the course of health sociology, factors influencing health, theoretical and practical possibilities to change these factors, and the corresponding situation in Estonia will be discussed. A profound look will be taken into the theoretical models explaining health behaviour and its change, model explaining how to develop an intervention programme that aims to improve health and quality of life, associations between health and social environment and the importance of policies in developing environments that promote health and decrease the adverse influence of unfavourable conditions.
During the course of environmental and occupational health, master students will get knowledge about main health risks of living and working environment and to understand the relationships between environmental risk factors and illness. Introduction into methodology of risk assessment take place and learning of prevention ways of harmful effects on population health is focused in the topic.

The course of research design will provide an overview of different types of research in public health. Design issues of published studies will be critically analysed.

During the course presentation of research results, the students learn the basic principles of preparing research reports and different types of presentations. These two courses aim mainly to assist students with preparation of their master thesis.

For specialization there are three tracks (24 credits each), out of which the first one has been operational for all years (2000-2003):

a) Environmental Health;
b) Occupational Health;
c) Health Management

The following is a description of the specialization tracks:

a) Environmental Health
List of courses: Introduction to health impact assessment and risk analysis (4 credits), Chemical and physical factors affecting the environment (4 credits), Biological environmental factors (4 credits), Environmental epidemiology (2 credits), Risk factors in food, drinking water and ambient air: their influence on human health and main methods for their impact assessment (4 credits), Environmental health policy and strategy (4 credits), Legislation in the field of health protection (2 credits).

b) Health Management
List of courses: Health systems and health policy (5 credits), Quality assurance and management (3 credits), Human resources management (2 credits), Basic economics (4 credits), The Occupational Health and Safety Act (2 credits), Medical law (1 credit), Health economics (3 credits), Introduction to public administration (4 credits)

c) Occupational Health
List of courses: Principles and methodology of risk analysis (4 credits), The influence of the chemical and physical factors on the environment (4 credits), Biological factors in the environment (4 credits), Occupational epidemiology (4 credits), Environmental health policy and strategies (4 credits), Introduction to the occupational psychology (2 credits), Occupational law (2 credits).

Elective courses (4 credits) can be chosen by students amongst any courses held at University of Tartu or elsewhere in Estonia or abroad.

Master thesis (20 credits) includes independent project or research work and writing the MPH thesis. Thesis is defended at a public disputation.
b) **Layout of the Curriculum of master of Sciences in Public Health:**

The compulsory subjects that each MScPH student has to take: Public Health (5 credits) and Presentation of research results (4 credits). Additionally, the student has to take the course on his/her speciality subject: Environmental and occupational health, Health care management, Epidemiology and biostatistics, Health sociology and health economics.

**Annex 9: Curriculum of Master of Sciences of Public Health**

Of the 5 credit points on the course of Public Health, one point corresponds to each of the five public health speciality areas. The objective of the course is to obtain the basic knowledge of the factors influencing health and ways to promote individual and population health. The students will learn about the concept of health and health promotion, historical development of this concept, the health impact of lifestyle, possibilities to influence health behaviour at individual and population levels. The health effects of living environment and healthcare system will be considered. Also the epidemiological methods of obtaining knowledge on population health and health risks are briefly introduced. This course is partially covered by lectures and practical assignments in the core module of the MPH programme, but there are also separate assignments given for the MScPH students. Also some individual discussions with the teaching staff of the Department are foreseen.

The rest of the credit points, 62 credits, are obtained from the independent research work. This includes 3 credits for proposal of a research project – the students have to prepare a detailed plan for their research – and 9 credits for writing a research paper. The rest of the credits, 50 points are obtained for writing and public defence of Master’s thesis.

**6.1.2 Organisation of practical assignments in connection with the theoretical part and as full learning activity**

The rules for preparing a curriculum at the University of Tartu exclude the possibility of an exclusive practical training as separate assignment. However, each course in the curriculum involves specific practical assignments that help to link the theoretical concepts studied with the practice of public health. For instance, during the course of health sociology, the students have a study day in Tallinn, at National Institute for Health Development. During the course of risk factors in food, drinking water and ambient air, there is a study day at Tartu Health Protection Service.

The main practical task for the students is to conduct a research study that their Master thesis will be based on. Most of the topics involve independent data collection and analysis. Each student has a supervisor among the staff of the Department, who will personally guide the student through design and conduct of the study. The students have scheduled regular individual meetings with the supervisor.

Students following the MPH curriculum, have to prepare a more practically-oriented thesis (20 credits), that has a value in local or national context. The thesis in the MScPH programme is bigger (50 credits) and should contain material for an international research publication. It is advisable that the research paper is submitted for the journal prior the public defence of the thesis.

Students have to report the progress of their research project regularly to the supervisor. Additionally, the students attending the MPH course, report the design concepts, methodological issues and intermediate results in the framework of courses “Research
design” and “Presentation of research results”. The students attending the MScPH course present twice a year their research on the scientific seminars of the Department.

6.1.3 Presence of a culminating experience in the field of project planning or research methods

Most of the students select the topic of their thesis before admittance for the master programme at the Department. In order to qualify for entrance to the MPH programme, the students are required to submit a preliminary plan for their thesis work. There are written guidelines available for the candidates to help in writing the study plan. A committee consisting of 5 faculty members (representing each of the 5 chairs of the department) is nominated each year to select students to the MPH course. The selection is based on discussion of the research plan for the thesis as well as general knowledge in public health. With the proposed plan and discussion with the committee, the candidate needs to demonstrate his/her motivation to study and work in the field of public health. After the discussions with the candidates, the board makes its decision and selects the most suitable candidates for the MPH programme.

The faculty of the Department, and especially the supervisor will suggest possible changes of the selected topic and/or specific research plan, if the preliminary plan is unfeasible.

All Master theses of previous years are available at the library of the Department. The students are free to use this cumulating experience in their thesis works and studies.

The requirements for the Master thesis are available on the website of the Department and they will be introduced to the students in a more detailed way during the courses on research planning and presentation, and also individually by the supervisor.

6.1.4 Internal coherence between learning activities, educational objectives and student assessment methodology

The aim of the MPH programme, as was stated in Chapter 1.2 is: to provide knowledge, skills and experience for expert decision-making, implementation of decisions, management and independent research and promotion in the fields of health care and public health.

As the MPH programme is still in its development phase, there are still some inadequacies in how the programme’s aim is translated into the practical aspects of the programme content. A large step to overcome this problem has been taken by implementing graduate feedback questionnaires and accumulating feedback information over several years to be able to discuss issues raised by the graduates and make amendments to the programme (see Chapter 5).

Perspective planning of Masters programme and integration between teachers and students would help gaining internal coherence between learning activities and educational objectives.
6.1.5 Awarding of a final degree, officially recognised by the relevant professional bodies and usable on the labour market

Accreditation of the curriculum: yes, conditionally accredited (Ministry of Education and Research, May 2004).

The written decision adopted by the Public Health Sciences Thesis Committee is submitted to the Office of Academic Affairs of the University and it serves as a basis for issuing the Master's Diploma.

6.2 Educational approach

6.2.1 Existence of a clear policy with respect to the pedagogical methods used in the school

Pedagogical methods used at the Department have been repeatedly discussed by the staff members. The methods have been unified to a certain extent, especially within each of the chairs. With respect to a clear policy regarding the pedagogical methods used, it is felt that there is a need for such a policy document.

6.2.2 Typology of the teaching/learning methodology

By nature, the area of public health is multidisciplinary, involving elements of medicine, biology, chemistry, mathematics, economics, law, etc. This is also reflected by the MPH programme.

The students are always welcome to discuss their practical issues, either from their Master project or from their everyday job in public health, in relevant courses. Several courses are directly related to the work on their master’s project, such as Research Design and Presentation of Research Results, where the students regularly have to report and discuss their ongoing work.

In some courses (environmental epidemiology, health economics, health sociology), the practical assignments and in-class discussions follow a problem-based approach: each student gets a different problem to investigate, mostly solved with the help of literature search. The findings will be discussed in the class.

6.2.3 Approach to student’s evaluation

Each course is evaluated separately, the students either get a grade on the 6-point scale (A-“excellent”, B-“very good”, C-“good”, D-“sufficient”, E-“fair”, F-“fail”) or a simple pass/fail note. The specific way of evaluation depends on course, but mostly is a combination of points given for independent work assignments and written in-class tests.

The main practical task for the students of MScPH programme is to conduct research, on which their master thesis will be based on. Most of the topics involve independent data collection and analysis. Each student has a supervisor from among the staff of the Department, who will personally guide the student through design and conduct of the study.
Students have scheduled regular individual meetings with the supervisor and present at least twice a year their research on the scientific seminars of the Department.

At the end of the programme, the students have to pass the final examination consisting of questions on all five major subject areas in the MPH curriculum. The exam commission consists of the heads of each of the five chairs at the DPH. Mostly, the questions on the final exams are related to the specific project the student has chosen for the thesis.

The Master theses will be defended in front of a 9-member interdisciplinary Public Health Sciences Thesis Committee. The Committee is nominated by the Council of the University of Tartu and incorporates 3 members from the Faculty of Medicine, 3 members from other Faculties of the University of Tartu and 3 members outside University:

Jaanus Harro, Professor of Psychophysiology, Faculty of Social Sciences
Raul Kiivet, Professor of Health Care Management, Faculty of Medicine (Chairman)
Heidi-Ingrid Maaroos, Professor of Family Medicine, Faculty of Medicine
Toomas Podar, PhD, Tallinn Regional Hospital
Aleksander Pulver, Professor of Psychology, Tallinn University of Pedagogy
Mati Rahu, PhD, National Institute for Health Development, Tallinn
Astrid Saava, Professor emeritus, Faculty of Medicine
Toomas Tenno, Professor of Environmental Chemistry, Faculty of Physics and Chemistry
Vahur Ööpik, Professor of Sports Physiology, Faculty of Exercise and Sport Sciences

The presentation and evaluation of the Master thesis consists of the following steps. The student has to present his/her thesis for preliminary review to the Committee. Two members of the Committee will act as referees. In 2-4 weeks the Committee will decide, based on the referees’ opinions, whether the student is allowed to defend the thesis or has to resubmit it after revision. When the Committee decides that the thesis is acceptable for public defence, the date of the defence will be fixed and an opponent is appointed. The opponent has to be an acknowledged specialist in the area of the thesis and hold an academic degree.

On the public defence, the student has to present the thesis and will hold an open discussion with the opponent, followed by an open discussion with the rest of the Committee and also the public present at the defence. After the defence, a closed meeting of the Committee will be held and the final grade will be decided upon voting among the Committee members. The Master’s thesis will be evaluated on a three-grade scale – cum laude, approbatur optime or approbatur.

The list of Master thesis defended at the Department is presented in Annex 10.

Annex 10: Master theses defended
Chapter 7: Teaching/learning facilities

The Department of Public Health was situated in three different locations until 1999. In the second half of 1999 the new building of Biomedicum was completed and Department together with other pre-clinical institutions moved to this building. It has strong impact for the quality and quantity of scientific and educational collaboration between different Chairs of Department and also with other departments of the Faculty located in the Biomedicum.

The Department is located in the left wing of the 4th floor of the Biomedicum. The size of facilities is 615 m², consisting of 12 office rooms, 1 lecture room, 1 library room, 5 laboratories, 6 auxiliary rooms and 2 rooms shared with other departments.

The active teaching process of Master programme is carried out at the Department in most cases. Some parts of the courses are organised outside the Department or outside the University in partner organisations. It is made possible for Master students to use the Department facilities for independent learning activities and practical assignments. There is a special room for Master students equipped with 2 computers that can be used for learning activities during free time.

Access to the Department is regulated through security magnetic cards and keys. During normal working hours (8.00-17.00) the entrance door to the Department is unlocked. Magnetic cards allow entrance to the building and to the Department outside normal working hours. All staff members have personal magnetic card and key to the office rooms. Access to laboratories is given to research staff. Master students can work at the Department also outside normal working hours. They can apply for the magnetic card that allows entrance to the Department and use the general key to open study rooms.

7.1 Library and research facilities

The Department has its own library with more than 2000 publications. The library has been complemented with the financial support of the World Bank Estonia Health Project. The space for the library is 38 m². The library is equipped with whiteboard and markers, screen, overhead projector, slide projector, copy machine and Internet connection. The library room seats about 16-20 persons for meetings/seminars.

It is possible to use library for independent work during the normal working hours of the Department. As the library is also actively used for group meetings, department seminars and teaching activities, it is sometimes quite difficult to find time for using the library for independent work. This is compensated by the use of the library in the evenings.

The Master students can borrow study books from the library as well as make copies of study materials there. The guidelines for using library room and borrowing books is placed on the wall of the library.

Library resources are quite sufficient for study and research purposes. All 5 public health areas are covered with a choice of literature (textbooks, handbooks, statistical yearbooks). Staff members make suggestions about purchasing contemporary literature or important documents and the books are bought according to available resources. Most of important Estonian public health literature and periodicals is represented in the library. The library is regularly updated with Estonian, Baltic and Nordic and international statistical yearbooks in
public health area. Weekly notice regarding incoming literature is sent by the secretary via e-mail to the personnel.

The Department subscribes several scientific journals, in addition, many necessary journals are available at the University library and current issues of some key journals are deposed for one month at the Biomedicum Library. Monthly notice regarding incoming journals to the Biomedicum Library is sent by the librarian by e-mail to all personnel. Staff of the Department has also online access to full-texts of many scientific journals through the Tartu University Library.

There are also other well-equipped libraries that can be used for learning purposes:

1. Library of University of Tartu. Located in the centre of Tartu, Struve St 1, opening hours Mon-Fri 9-21, Sat-Sun 11-17
   Scientific literature needed by the Faculty of Medicine has been concentrated to the Tartu University Library, where there is 3.7 millions volumes altogether, from those the study material makes up 10% and foreign language scientific periodicals - about 12%. The catalogue of the Tartu University Library can be found in the common electronic catalogue INNOPAC of the Estonian scientific libraries.

2. Biomedicum Library (branch of the Library of University of Tartu)
   Located in Biomedicum Ravila St 19 room 1023, opening hours Mon-Fri 9-18. Library contains mainly medical literature and journals. One of the purposes of the branch is to mediate borrowing from other libraries to students and researchers

3. Medical Library in Tallinn Lai St 22, opening hours Mon-Fri 9-20
   Medical Library is the centre of medical literature of the Republic. It complements both the Estonian and foreign books and periodicals. It is possible to get information about the medical literature published all over the world from CD-ROM databases. The library compiles medical bibliography of Estonia. The library fund contains over 218 798 volumes.

The Department has 5 well-equipped laboratories where independent research work can be carried out. There is a possibility for Master students to join into research groups studying different health risk factors. The main research areas are: physical, chemical and biological risk factors in occupational or home environments, health behaviour, risk behaviour of individuals, personality and psycho-biological markers. The laboratory of Work Environment was established in 2003 and was accredited by the Estonian Centre of Accreditation. This laboratory is developing its own database of risk from indoor environments from scientific studies and services provided to several institutions. This accumulating information can be later used in Master projects.

7.2 Computer laboratory

The Faculty of Medicine has computer classes outside the Biomedicum building. The computer facilities are located in the Medical School of Tartu premises, about 500 metres away from the Biomedicum building. Every student of the Faculty has free access to the computers during the time that is not reserved for courses. The computer class is open every working day from 8.00-17.00. Some practicals of the Master studies courses are taking place in the computer room.

Using computer facilities helps the students to get skills in information retrieval from libraries and online databases as well as to perform statistical analysis with statistical software and to practice different presentation methods.
All staff members of the Department are provided with personal computers that have Internet connection. Most of the computers have statistical packages for analysing data (SAS, SPSS, STATA).

The Department does not organise special computer courses within the Master programme. Computer courses are organised regularly by the Faculty of Mathematics. Courses are free for Master students but pre-registration is needed.

7.3 Teaching rooms

The Biomedicum building has auditoriums, seminar rooms and educational laboratories on the ground floor. Most teaching on undergraduate level takes place in these premises. All rooms are well equipped with audio-visual technical equipment. The Department has two rooms used for teaching/learning activities on postgraduate level (a lecture room and the Library). The lecture room with 20 seats is equipped with white board, screen, overhead projector, stationery data projector and a slide projector. The Department has also a TV/Video and data projection set that can be used in different rooms. Seminars and workshops for Master students take place mainly in the library. Both the lecture room and the library are well equipped with audio-visual equipment ready to use and suitable for different educational methods. It is possible to move tables and technical tools according to the needs. These rooms are actively used for teaching and it is sometimes not possible to book them for teaching. This problem can be solved using alternative teaching rooms on the ground floor of the Biomedicum. Some parts of courses take place outside the Department in other institutions (computer class of the Faculty, Health Protection Service in Tartu, National Institute for Health Development and Ministry of Social Affairs in Tallinn).

7.4 Residential facilities

The Department is not specially providing assistance to find accommodation for the students. The students are informed about the possibilities to get accommodation at the University facilities during the first introductory meeting.

The Tartu Student Village is offering accommodation for students, guests and the staff members of Tartu University. The Student Village owns eight fully functional dormitories. Short-term accommodation is offered in 3 buildings (Raatuse 22, Pepleri 14 and Purde 27). The rooms should be booked in advance in the housing department of the University. All dormitories are close to the bus route as well as to the town centre. In addition, the dormitory of Tartu Medical School (Nooruse 5, within walking distance from Biomedicum) is housing guests for short-term visits. The Tartu University Hospital Pansionate (Mõisavahe 66) is offering accommodation at low prices as well. The prices range from 10-32 € in all dormitories described above.

Until now, only few Master students have used the accommodation services. Dormitory of the Tartu Medical School is preferred because of the good location and cheapest prices. Other students who are living outside Tartu are using the hospitality of relatives or friends for staying in Tartu during study periods.

7.5 Language courses

The curriculum of Master programme does not offer any language courses. The language courses at the University are free for students of the University of Tartu. The training takes
place in University Language Centre and pre-registration is needed. Language courses (or any other courses taken from the University) can be registered within the Master curriculum as elective courses.

Good English language skills are vital for successful study process during the Master programme as most of the textbooks and scientific literature are in English language. Only few students have used the good opportunity to train their language skills within Master programme, but many students have used the alternative of taking language courses from other language training centres (usually financed by their employer). The reason for this may be that it is more convenient for the student to take language courses in a city where they are living/working.

7.6 Administrative staff, students office

Master programme is administrated with the help of several persons. Coordinator of the programme is responsible for management and maintaining of documents and other materials concerning Master programme, compiling of timetables, and mediating necessary information to Master students. Secretary of the Department is dealing with different kind of paperwork and document preparation. Two laboratory assistants help the teaching staff and Master students in copying and preparing study materials, room reservations and other technical help.

In addition to the Department, students can solve the majority of problems concerning the studies at the dean's office of the Faculty. There are student-consultants working in the Office of Academic Affairs at the University.

During the first years of the Master programme the administrative tasks were not clearly appointed to special persons and there was a lack of information exchange. There was also a need for a tutor or a person who could assist and help students in solving upcoming problems. By now the situation has improved and the work of the staff members is rather efficient.

All information concerning Master studies is also available in the Department’s homepage and it is updated regularly (http://biomedicum.ut.ee/arthur/). According to the students feedback, the information about studies has improved with years and students have good contacts with teaching staff.

Number of students in the Master programme is relatively small, therefore there has been no need for formation of student delegates. In case any problems concerning studies occur, all students as a group take part in discussions with teachers or the coordinator. Still, the students have not been involved in discussions concerning the content and quality of Master programme. The Department is discussing the involvement of graduates in the development of Master programme.

7.8 Summary - teaching and learning facilities

The teaching and learning facilities of the Department are considered to be very good. In spite of this there is still room for improvements (by better organisation of work, using alternative facilities outside the Department, better access to computers for students etc.)

On the strong side, the research laboratories give excellent opportunities for improving competence and to do independent research work.
8. Research

8.1 The students

The MPH program is designed to prepare graduates to tackle real public health problems as practitioners who can apply their breadth of understanding, as well as some degree of expertise and experience in at least one specific area of public health. Therefore it contains special training courses aiming at teaching students for critical appraisal of the research evidence (analysis and synthesis).

The MPH programme includes following specialised training courses directly related to scientific research to all master students:

- ARTH.03.010 Epidemiology and biostatistics (5 credits)
- ARTH.02.043 Research design (4 credits)
- ARTH.02.044 Presentation of research results (3 credits)

and specific research courses in two specialities:

- ARTH.01.066 Environmental epidemiology (2 credits)
- ARTH.01.070 Introduction to occupational epidemiology (4 credits)

The course of Epidemiology and Biostatistics provides basic knowledge of descriptive epidemiology and basic statistics necessary for understanding health data and assessing health interventions. The specific courses in Epidemiology deepen the students’ understandings in different research methodologies used in different public health specialities. At the beginning of the courses of Research Design and Presentation of Research Results, the students gain knowledge about different types of research in public health and learn how to present research results. During those courses the students also have the opportunity to design their own research plans, present their results to teachers and peers, and oppose each other’s research.

The MScPH programme includes following research courses:

- ARTH.02.037 Presentation of research results (4 credits)
- ARTH.02.038 Writing a research paper (9 credits)
- ARTH.02.048 Proposal of a research project (3 credits)
- ARTH.03.010 Epidemiology and biostatistics (5 credits)
- ARTH.03.011 Epidemiology, biostatistics and research planning (3 credits)

The MScPH students take the courses of epidemiology, biostatistics and research planning together with MPH students. Other research courses within this programme do not have classroom teaching. There are certain milestones within the programme, which require independent work ("learning by doing"). When the milestone is reached, the course is passed and credits obtained.

Both programs require independent research, which finalises with writing and presenting of the Master thesis.

8.2 The SPH: Department of Public Health, University of Tartu

Students are able to learn and participate in research first hand from faculty members (most are employees of the University of Tartu) who are actively engaged in the practice of
research addressing the public health problems and priorities in Estonia. This relationship exposes the student to a range of real-world, scientifically based environmental and public health problems and to an organization with a tradition of high-quality research.

Our research methods and standards follow the protocols approved by the Ethics Review Committee (ERC) on Human Research of the University of Tartu. This institutional review board is responsible for reviewing research protocols, including research methods, procedures, consent forms, and all other appropriate forms and survey instruments for all projects, regardless of funding or location, which involve the use of human subjects. It is the responsibility of the Faculty and students to make certain that clearance is obtained from the Committee on Human Research before beginning any research involving human subjects.

8.2.1 List of the funded projects

The list of the funded research and applied projects at the Department in 2001-2004 is presented in Annex 2.

Students have the possibility to participate in research activities of the Department and many are involved in different projects. Diva Eensoo and Liis Merenäkk have completed their Master thesis within the project “Genetic preconditions, personality traits, living conditions and lifestyle influencing the development of risk factors of heart and atherosclerotic diseases in 9-16 years old children. The European Youth Heart Study (EYHS) I”. Liis Rooväli has completed her Master thesis within the projects “Needs assessment for health care services in Estonia” and “Connections between health status and utilization of health care resources in Estonia – gender and age differences and dependence on social status and subsistence”. Krystiine Liiv has completed and Imbi Jaks and Reelika Kiivit are preparing their Master thesis within the project “Longitudinal study on development of cardio-vascular risk factors in children and youth. European Youth Heart Study II”. Oleg Novikov is doing research within the project “Connections between health status and utilization of health care resources in Estonia – gender and age differences and dependence on social status and subsistence”, Seila Mündi within the project “Determinants of dropping out of school in Estonia”, Juta Voist within the project “Tackling HIV-infection in Estonia”, Kaire Vals within the project “National burden of diseases study”, Katrin Kõiv and Tanel Simion within the projects “Evaluation of health determinants and efficacy of health interventions in Estonia” and “Influence of patient co-payments on health care accessibility”.

Because many MPH students already work in the field of public health, they can collect and use their own data for research purposes to complete the Master thesis. Assistance by the teaching staff and supervisors is provided.

8.2.2 Percentage of staff involved in research

According to the rules of the University every member of the academic staff has to be engaged in research, as one of the criteria to be elected or re-elected for academic posts at the University is research.

Research and teaching staff of the Department belong to The Estonian Centre of Behavioural and Health Sciences (CBHS, the web home page is: http://psych.ut.ee/~ekttk/index.en.html). The CBHS was established in 2001 in the process of selection of Estonian Centres of Excellence, with an aim to ensure appropriate conditions for research to the already available competence in these disciplines in Estonia, to guarantee further development and world class
standards through a co-ordinated research network and integrated graduate study programs, and to bring together theoretical and applied research with special emphasis on multidisciplinary approach. The main directions of research at CBHS are the processes of perception and cognition, the structure of personality and its biological and cultural underpinnings, the convergent influence of personality and environment on behaviour and health, child development and assessment and promotion of children's health, assessment of persistence of individual differences and their neurobiological modelling, the physiological, psychological and social determinants of health, and longitudinal and multilevel assessment of health impacts. CBHS consists of 10 research groups, 2 of them (Biostatistics and Health Care Research Group and Health Behaviour Research Group) come from the Department. Master students are involved in the activities of the research groups of the CBHS.

The whole staff of the Work Environment Laboratory is involved in research as they are giving practical advice in connection to applied research in order to provide basis to more in-depth research on working and indoor environment. Most of the staff of the Work Environment Laboratory is taking part in the MPH studies.

The technical support staff is helping with some tasks in research such as copying and mailing questionnaires, assisting participants of undergoing research, entering data etc.

8.2.3 Impact of thesis work

The graduate programs in public health are designed to develop skills and capability in the practice and teaching of this discipline. The major expected impact of the thesis work is to provide the ability to perform independent work by understanding and applying the theory, methods and knowledge of the scientific approach in practicing public health for students who are already employed or plan to be employed in multiple settings, including university, governmental agencies, health care facilities and private industry.

List of Master thesis defended is given in Annex 10.

Annex 10: Master theses defended

The results of research are presented in Annual National Health Protection Conferences and published in Annual Health Protection Reviews. Findings from thesis work are available to policy makers to be considered for guidance in actions to improve public health.

8.3 The teachers

8.3.1 Examples of active integration of research activities in training

Our faculty has a unique diversity of research interests and actively encourages cross-disciplinary research problems. Teachers are using results of their research continuously in training process. The list of the research papers published by the staff of the Department during 2001-2004 is added in Annex 11.

Annex 11: Published research papers of the Department 2001-2004

The Department offers five broad areas of specialization (called tracks). The following is a description of research activities by tracks and examples of integration of research activities in training.
1. Environmental and Occupational Health

Our researchers in the field of environmental health consider the adverse effects on the human body of chemical, physical, and biological agents, either occurring naturally or introduced into the environment by man. The program benefits from incorporating the Laboratory of Occupational Environment, a modern, well-equipped comprehensive unit that provides services to several working facilities in Estonia. This relationship exposes the student to a range of real-world, scientifically based environmental problems and to an organization with a tradition of high-quality research. The proficiency for complete use of the possibilities of the current equipment is still lacking. The future better integration of Laboratory’s activities with Master studies is essential.

2. Epidemiology and biostatistics

These specialists at the Department use their knowledge of medical and behavioural sciences as well in mathematics and biostatistics to develop theoretically sound and practically feasible research studies and programs to investigate the causes of disease occurrence in population, including characteristics of individuals and their physical and social environment. To investigate these complex relationships, epidemiologists conduct both analytical and descriptive studies in the community using and developing the statistical methods necessary to assess actual risks to the public.

3. Health care management

Researches are analysing existing health systems in the search for better ways to improve patient outcomes and in order to increase access to health and preventive services. These tasks demand that we test new strategies for measuring the health of populations and individuals, as well as their risks of disease and injury, and find those characteristics of health services that reflect access to care, as well as its quality and cost.

4. Health economics

We are evaluating primary care reform in Estonia comparing the different arrangements of organizing family doctors practices, introducing health technology assessment programs in Estonia and conducting cost-effectiveness studies.

5. Health promotion

In the field of health education and promotion the researches are studying epidemiology and the behavioural risk factors in HIV/AIDS and drug addiction. Studies on adolescent risk-taking are carried on. We are working to lessen the incidence of HIV and sexually transmitted disease (STD) transmission.

The educational experience is enhanced through study with senior-level public health, health practitioners and researchers who are directly involved in research (guest professor Mati Rahu, head of the Department of Epidemiology and Biostatistics in National Institute of Health Development; professor emeritus Marika Mikelsaar, docents Tõnis Karki, Tatjana Briliene and Reet Mändar and researchers Epp Sepp, Epp Songisepp and Tõnu Krispin from the Institute of Microbiology, University of Tartu), in the formulation and implementation of public health (Ants Jõgiste, Kuulo Kutsar and Heino Lutsoja from Health Protection...
Inspectorate; Lehte Savitskaja from Ministry of Environment) and health policy and management strategies (Ain Aaviksoo, Estonian Ministry of Social Affairs).

8.3.2 Teacher’s approximate time for research

According to the rules of the University of Tartu, every member of the teaching staff has to teach, practice research and perform other work-related activities during the normal working time. The amount of teaching hours is fixed in each job description and was given in Chapter 4. The extent of work related activities varies between jobs and between persons. The amount of hours for research is not regulated. It is the responsibility of each teaching staff member to dedicate sufficient number of hours for research in order to gain reasonable results, i.e. to be re-elected to the current job or move higher in the career.

For the research staff the job description is different, with the main task to conduct the research, while the proportion of teaching in their activities is considerably low (64 hours per year).

8.3.3 Description of the rewarding system concerning this topic

1. Academic career development
   Every teaching and researcher at the University of Tartu has been elected according to the specific formal criteria for a certain time period. To be elected, re-elected or promoted in the academic carrier one has to fulfil certain criteria required for this post (academic degree, teaching experience, supervised graduate students, published papers, received research grants etc.). Also see Chapter 4 and Annex 6.

2. Financial aid
   With the financial support of the World Bank Estonia Health Project (in 1998-2000), the Department has financed the training of the staff abroad and participation in international conferences. Currently the participation in international conferences is financed by research grants.

3. Traditional promotions
   1) Financial gains
      • Academic staff and students participate regularly in Annual Conferences of Tartu University Medical Faculty. Best oral and poster presentations are voted for which financial prizes are given (e.g Maarike Harro in 2002).
      • Students can participate in national research competition with their defended master thesis. For the bests financial prizes and diplomas are given (e.g Argo Soon in 1997, Liis Merenäkk in 2002, Liis Rooväli in 2003).
   2) Individual recognition (medals, honors)
      • To senior academic staff (upon retirement) the University of Tartu medals are given (e.g Astrid Saava in 2003).
      • Professors who have worked at least 15 years in the University of Tartu may be elected Professor emeritus (e.g Astrid Saava in 2003).

4. External recognition
   Members of academic staff have received national and international recognition for their activities.
1) National

2) International
   - Maarike Harro. Honorary University Fellow in the School of Postgraduate Medicine and Health Sciences in the University of Exeter, UK, 2000.
9. Institutional Quality Management System

The Quality Management (QM) system as a part of the organization’s management system should focus on the achievement of results, in relation to the quality objectives, to satisfy the needs, expectations and requirements of interested parties, as appropriate. In Estonian public sector (and in the field of education, too) the introducing of the QM principles is still at the very early stage of development. Today there is no evidence of introducing and implementing the QM system in any of Estonian universities. In 2003, the Minister of Education pointed out the need for quality assurance in the educational system, and the importance of quality assurance was acknowledged by the Rector of the University of Tartu as well.

At the end of 2003, the basic principles of QM were discussed among the staff of the Department. The common understanding is that today we cannot yet speak about the QM system. There is a list of basic requirements, which could be seen as quality elements or quality indicators, but there is lack of internal agreements and system to guarantee the failure-free process.

The following description includes the existing quality elements and will propose the steps towards the QM system development.

9.1 Existence of a set of quality indicators regarding teaching staff, research, teaching programmes, student careers

Quality indicators regarding the teaching staff. The standards of quality for recruiting teaching staff are common for the whole University, and the Department has to follow these requirements and was described in Chapter 4. Also see Annex 6 for eligibility requirements for academic staff at the University.

According to the Professional requirements and job descriptions for academic staff of University of Tartu the most important part of professional requirements of academic staff (teachers and researchers) is scientific work and development activities. In this area the first priority is given to the publications in peer-reviewed scientific papers in international high-accepted (cited in several international databases) journals and success in getting money from several foundations for scientific research. Other parts of scientific and development work such as making scientific expertises, implementation of scientific results by consultations and negotiations, etc. are underestimated as quality indicators.

In the field of teaching the first priority is given to the number of contact hours of lectures and seminars. Other teaching responsibilities such as consultations, supervision of master and doctoral students, management of field assessments, evaluating of results of independent work etc. are frequently underestimated by the Faculty of Medicine. This is problematic as the teaching staff can not concentrate in teaching, but have to perform other responsibilities undervalued by the Faculty, and this could lower quality of future specialists.

It would be reasonable to implement the system which accounts for all these activities in the University teacher’s workload.

Also see Annexes 4, 5 and 11 for the CV’s, continuous training, and publications of the teaching staff of the Department, respectively.
Evaluation the human resources of the Department: teaching, research and continuous professional training. All teachers and researchers report annually of teaching hours, research, publications and presentations as well as continuous professional training (as was described in Chapter 4). These individual reports are evaluated by the Head of the Department and the executive of the Department of Human Resources. The summary report of the Department is evaluated by the Faculty of Medicine and the Research Department of the University. As pointed out in Chapter 4, the Department has no formal plan and budget for the continuous education of the staff.

The quality of the teaching programs and students evaluation. The guarantee the quality of teaching programs all programmes have to be approved by the Council of the University.

The University of Tartu has implemented the students’ evaluation and feedback system mainly at the undergraduate level. This system is not implemented on the MPH level. The evaluation and feedback system for the MPH graduates was introduced in the beginning of the year 2004. The first results about this evaluation of programmes and programme components were discussed in Chapter 5. (p. 5.6).

Existence of an external quality assessment regarding examinations and other assessment methods, research, programme or programmes. In October 2003, the external evaluation of the research was conducted by international review teams (see Chapter 2.3). The research work of the Department was highly evaluated. The results of the evaluation were presented and discussed with the staff of the Department.

In May 2004 the MPH curriculum as well as the examinations and other assessment methods passed the external review by the international accreditation committee. The MPH curriculum was provisionally accredited until June 30th, 2007. The accreditation report is available on the web site:

http://www.ekak.archimedes.ee/cgi/okavad/public/show_lo.py?oid=89153. However, until now the report is not yet presented nor discussed with the staff of the Department.

CONCLUSION RECOMMENDATIONS given by the assessors were as following:

1) Curriculum committees to oversee programmes in Public Health should be nominated. These committees should be representative of the participating units and other relevant stakeholders, including students.

2) The system for monitoring student progress and for evaluating faculty teaching should be made clear for faculty and students alike. The results should be recorded and used to inform programme development.

3) The aims and content of the MSc in Public Health should be revised to offer a broader introduction to Public Health research, including ethical and methodological issues. Although the Credit Points for the thesis would have to be reduced, it would be possible to maintain a strong research element nevertheless.

At the present the students are examined by the internal examination committee, which includes the heads of all chairs of the Department. The thesis are defended in the presence of interdisciplinary committee, the external experts are usually involved in the review process of the thesis.
9.2 Existence of an internal body dealing with quality assurance

At present the internal quality assurance body does not exist. During the self-assessment period the need for such body as well as introducing the quality management principles became more and more apparent. This recommendation was given by the ASPHER experts in June 2004 as well, and two persons were appointed as members of the QA body. Introducing the quality management principles in the Department and the reorganisation of the management of the Department according to these principles is essential to solve the existing problems. We have understood that the quality of structure (staff, facilities, equipment) of the Department is high, but without skilled management of the processes the achievement of the high results is complicated.

9.3 Continuous assessment of the relevance of the programme to career development

This area is still developing and the formal evidence about the fulfilment of these criteria cannot be presented at the moment. These problems have been discussed and the staff members are aware of the need for assessment.
Annexes
Annex 1: Organisational chart showing the location of the Department and its component units.
Annex 2: List of funded research projects in 2001-2004

Internationally funded projects:


National research projects:


ESF grant 3277 Genetic preconditions, personality traits, living conditions and lifestyle influencing the development of risk factors of heart and atherosclerotic diseases in 9-16 years old children. The European Youth Heart Study (EYHS) I (1998-2001) PI: Maarike Harro

ESF grant 3900 Health economic evaluation of primary care reform (1999-2002) PI: Kersti Meiesaar

ESF grant 3979 The sick building syndrome in office workers in Estonia (1999-2001) PI: Argo Soon

ESF grant 4430 The psycho-social background, working history conditions, job satisfaction, views on education and personal values of Estonian junior physicians (2000-2002) PI: Astrid Saava

ESF grant 5203 Analysis of medical data with incomplete information (2002-2005) PI: Krista Fischer

ESF grant 5209 Longitudinal study on development of cardio-vascular risk factors in children and youth. European Youth Heart Study II (2002-2005) PI: Maarike Harro


ESF grant 5451 Determinants of dropping out of school in Estonia (2003-2006) PI: Maarike Harro


National applied research projects:


LSOPH01030 Estonian Road Administration. Personality factors influencing driving drunk a car and their connections to the monoaminoxidas (MAO) activity (2001) Investigators: Diva Eensoo, Maarike Harro


National Programme to prevent HIV and AIDS. Behaviour related to HIV infection in 10-to 29-years-old children and adolescents of Estonia (2003) PI: Maarike Harro


Annex 3: Academic, scientific and administrative staff of the Department

### Administrative and technical support staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Raul-Allan Kiivet</td>
<td>MD. PhD</td>
<td>Professor</td>
<td>1.0</td>
<td>1960</td>
<td>male</td>
</tr>
<tr>
<td>2. Karne Ama</td>
<td></td>
<td>Secretary</td>
<td>1.0</td>
<td>1978</td>
<td>female</td>
</tr>
<tr>
<td>3. Katri Reinumägi</td>
<td></td>
<td>Secretary</td>
<td>1.0</td>
<td>1972</td>
<td>female</td>
</tr>
<tr>
<td>4. Ludmilla Jakobson</td>
<td></td>
<td>Lab. Assistant</td>
<td>1.0</td>
<td>1954</td>
<td>female</td>
</tr>
<tr>
<td>5. Endla Anni</td>
<td></td>
<td>Lab. Assistant</td>
<td>1.0</td>
<td>1941</td>
<td>female</td>
</tr>
<tr>
<td>6. Kaido Põlluste</td>
<td></td>
<td>IT Specialist</td>
<td>0.5</td>
<td>1961</td>
<td>male</td>
</tr>
</tbody>
</table>

**Chair of Environmental and Occupational Health**

<table>
<thead>
<tr>
<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Astrid Saava</td>
<td>MD. Dr.Med.</td>
<td>Professor (emeritus since Aug 2003)</td>
<td>1.0</td>
<td>1938</td>
<td>female</td>
</tr>
<tr>
<td>8. Eda Merisalu</td>
<td>MD. PhD</td>
<td>Associate Professor</td>
<td>1.0</td>
<td>1955</td>
<td>female</td>
</tr>
<tr>
<td>9. Argoo Soon</td>
<td>MD. MPH</td>
<td>Senior Assistant</td>
<td>1.0</td>
<td>1965</td>
<td>male</td>
</tr>
<tr>
<td>10. Ene Indermitte</td>
<td>MPH</td>
<td>Researcher</td>
<td>0.5</td>
<td>1967</td>
<td>female</td>
</tr>
</tbody>
</table>

**Chair of Health Promotion**

<table>
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<tr>
<th>Name</th>
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<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Maarike Harro</td>
<td>MD. PhD</td>
<td>Associate Professor</td>
<td>1.0</td>
<td>1960</td>
<td>female</td>
</tr>
<tr>
<td>12. Kersti Pärna</td>
<td>MD. MPH</td>
<td>Senior Assistant</td>
<td>1.0</td>
<td>1960</td>
<td>female</td>
</tr>
<tr>
<td>13. Aidula-Taie Kaasik</td>
<td>MD. PhD</td>
<td>Senior Research Associate</td>
<td>0.25</td>
<td>1934</td>
<td>female</td>
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</table>

**Chair of Epidemiology and Biostatistics**

<table>
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<tr>
<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Krista Fischer</td>
<td>PhD</td>
<td>Associate Professor</td>
<td>1.0</td>
<td>1970</td>
<td>female</td>
</tr>
<tr>
<td>16. Katrin Lang</td>
<td>MD. MPH</td>
<td>Senior Assistant</td>
<td>1.0</td>
<td>1963</td>
<td>female</td>
</tr>
<tr>
<td>17. Anneli Uusküla</td>
<td>MD. MSc. PhD</td>
<td>Research Associate (extraordinary)</td>
<td>1.0</td>
<td>1967</td>
<td>female</td>
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</tbody>
</table>

**Chair of Health Care Management**

<table>
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<tr>
<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. Kaja Põlluste</td>
<td>MD. MPH</td>
<td>Senior Assistant</td>
<td>0.5</td>
<td>1967</td>
<td>female</td>
</tr>
<tr>
<td>19. Diva Eensoo</td>
<td>MScPH</td>
<td>Research Associate (extraordinary)</td>
<td>1.0</td>
<td>1963</td>
<td>female</td>
</tr>
<tr>
<td>20. Liis Rooväli</td>
<td>MD. MScPH</td>
<td>Research Associate (extraordinary)</td>
<td>1.0</td>
<td>1968</td>
<td>female</td>
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</tbody>
</table>

**Chair of Health Economics**

<table>
<thead>
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<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Kersti Meiesaar</td>
<td>PhD. (Econ)</td>
<td>Associate Professor</td>
<td>1.0</td>
<td>1950</td>
<td>female</td>
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</table>

**Work Environment Laboratory**

<table>
<thead>
<tr>
<th>Name</th>
<th>Scientific degree</th>
<th>Title</th>
<th>Work-load</th>
<th>Year of birth</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Heiki Annuk</td>
<td>MD</td>
<td>Project Manager</td>
<td>0.5</td>
<td>1969</td>
<td>male</td>
</tr>
<tr>
<td>23. Aare Floren</td>
<td>BSc (Physics)</td>
<td>Project Manager</td>
<td>0.5</td>
<td>1977</td>
<td>male</td>
</tr>
<tr>
<td>24. Kristjan Aruoha</td>
<td>BSc (Physics)</td>
<td>Project Manager</td>
<td>1.0</td>
<td>1977</td>
<td>male</td>
</tr>
<tr>
<td>25. Paavo Kaleva</td>
<td>BSc (Physics)</td>
<td>Project Manager</td>
<td>1.0</td>
<td>1982</td>
<td>male</td>
</tr>
<tr>
<td>26. Monika Jürgenson</td>
<td>BSc (Chem)</td>
<td>Project Manager</td>
<td>0.75</td>
<td>1972</td>
<td>female</td>
</tr>
<tr>
<td>Ene Indermitte</td>
<td>MPH</td>
<td>Specialist</td>
<td>0.5</td>
<td>1967</td>
<td>female</td>
</tr>
</tbody>
</table>

1 since July 2003 Director of the National Institute for Health Development
CURRICULUM VITAE

1. **Name** Diva Eensoo
2. **Position** Researcher, Department of Public Health, University of Tartu
3. **Date of birth** 14 of December 1963
4. **Education**
   1) The 1st Secondary School of Valga, graduated 1982
   2) University of Tartu, Faculty of Medicine, pharmacy 1982-1987
   3) University of Tartu, Master studies in biomedicine (Public Health) 1996-1998
5. **Research and professional experience**
   1987-2000 senior laboratory assistant in Department of Public Health, University of Tartu
   since 2000 researcher in Department of Public Health, University of Tartu
6. **Academic degrees**
   Master of Science in Public Health, University of Tartu, 2000
7. **Research-administrative experience**
   Estonian Society of Biological Psychiatry, member
   Scientific Health Protection Society of Tartu, member
8. **Current research areas**
   Main topics are:
   - traffic behaviour, biological indicators, their association with personality traits and health-behaviour;
   - physical activity in association with mental health and personality traits;
   - family socio-economic status and health-related behaviour in children.
CURRICULUM VITAE

1. **Name:** Krista Fischer (maiden name: Krista Lapp)
2. **Date and place of birth:** August 5th, 1970; Tartu, Estonia
3. **Current employment status:**
   Associate professor in Biostatistics
   Department of Public Health, University of Tartu
4. **Education (institution, year of graduation/awarding academic degree):**
   University of Tartu, 1999, Doctor of Philosophy in Mathematical Statistics
   Limburg University, Belgium, 1994, Master of Science in Biostatistics
   University of Tartu, 1994, graduated with diploma in Mathematical Statistics (Faculty of Mathematics)
5. **Language competences:**
   Estonian, English, Dutch, German (spoken language), Russian (spoken language).
6. **Professional employment:**
   since 2001, associate professor in biostatistics, Department of Public Health, University of Tartu
   1999-2001, post-doctoral researcher at the University of Ghent, Belgium
   1994-2000, researcher at the Institute of Mathematical Statistics, University of Tartu.
7. **Major research areas:**
   Medical statistics, analysis of noncompliance in clinical trials, causal inference, structural mean models, longitudinal data analysis, generalized linear models.
8. **Number of scientific publications:** 20
9. **Supervision**
   Heti Pisarev defended her Master’s Thesis “Structural nested mean models for repaeted measures” on February 23, 2001 and the degree “Master of Science in Mathematical Statistics” was conferred.
   Ülle Kirsimägi defended her Master’s Thesis “Survival analysis of Kidney transplantations in Estonia” on June 18, 2003 and the degree “Master in Mathematical Statistics” was conferred.

III **Administrative and other responsibilities**

Belonging to the board of the Faculty of Mathematics, University of Tartu, in the academic year 1997/98.

Member of the International Biometric Society, International Society for Clinical Biostatistics and Estonian Statistical Society
CURRICULUM VITAE

1. Name: Maarike Harro (until 1997 Sallo)
2. Date of Birth: December 22, 1960 in Tartu
3. Position:
   Present
   July 2003 - Director of the National Institute for Health Development in Estonia (Tallinn)
   Previous
   2000- Associate Professor (Docent), Head of the Chair of Health Promotion, Department of Public Health, University of Tartu (position stopped from July 2003 until August 2004)
   1998-2000 Senior lecturer, Department of Public Health
   1990-1998 Lecturer, Department of Public Health
   1990-1996 Postgraduate student in the Department of Public Health

4. Education:
   1988 Residenture in pediatrics, Tartu Clinical Children’s Hospital
   1987 Medical Doctor, Tartu University, cum laude.
   1979 Tartu Secondary School No2.

5. Academic Degrees
   1997 Ph.D. (in medicine, Public Health), University of Tartu “Studies on habitual physical activity and aerobic fitness in 4 to 10 years old children”

6. Research and professional experiences:
   1993 Fellowship in the School of Public Health, University of Albany and in the New York State Department of Health, Albany, New York, USA

7. Honors, awards
   an Honorary University Fellow from 1 March-31 August 2000 in the School of Postgraduate Medicine and Health Sciences in the University of Exeter, UK

8. Research-administrative experiences
   2000- Head of the Chair of Health Promotion, Department of Public Health
   2001- Advisory board for Health Promotion projects in Estonian Sick Fund
   2002- member of the Advisory Council for the President of Estonia in the area of social affairs (June to December 2003 the head of the Council)
   2001- Head of the Group of Health Behaviour Studies in the Estonian Centre of Excellence in Behavioural and Health Sciences
   2001- representative of Estonia in the COST A19 “Children’s Welfare - Children’s access to space and use of time”
   2003- Expert for children’s nutrition in ILSI

Conferences and symposia organised:

9. Dissertations advised
Diva Eensoo. Association of physical activity with mental health and personality (in Estonian) Thesis for M.Sc. in Public Health, University of Tartu, 2000 (non-official co-supervisor with Jaanus Harro)

Liis Merenäkk Association of alcohol and drug use with personality and platelet MAO activity in school children. Thesis for M.Sc. in Public Health, University of Tartu, 2002 (co-supervisor with Jaanus Harro)

Krystiine Liiv Association of smoking with personality in school children: longitudinal analysis. Thesis for M.Sc. in Public Health, University of Tartu, 2003 (supervisor)

10. Current research areas
The influence of perceived and real socio-economic deprivation on the health and health related behaviour of children
2001/2002 The second wave of the European Youth Heart Study (second study among older group of participants).
Effectiveness of Health Promoting School program (1993-2002) in Estonia
2002 Effectiveness of Health Promoting media campaign in HIV prevention
2002 Determinants of behaviour associated with the transmission of HIV infection in 10-to 29-years old Estonian youth
2002 Health related behaviour in pregnant women of Estonia
The impact of free School Milk and Hot Lunch programmes on tackling economic inequalities in primary school children of Estonia
2003 Determinants of dropping out of school
CURRICULUM VITAE

1. First name       Ene
2. Surname          Indermitte
3. Institution      University of Tartu
                    Department of Public Health
4. Position         Researcher, specialist
5. Date of Birth    21.04.1967
6. Education        University of Tartu
                    Diploma in Biology 1992
7. Research and    University of Tartu, Department of Public Health,
    professional experience       specialist 2003-...
                   researcher 2000-2002
                     laboratory assistant, 1999-2000
                    University of Tartu, Institute of Zoology and
                    Hydrobiology, laboratory assistant, 1992-1998
8. Academic degree Master of Public Health (MPH)
9. Dates and sites  University of Kuopio, Finland 1999
    earning the degrees
10. Administrative Coordinator of Public Health Master Program
    experience                     since january 2003
                                      Development of laboratory of work environment
                                      (microbiology unit) and writing of Quality manual
11. Teaching experience Teaching in the Chair of Environmental and occupational
                                      health in Medical Faculty
                                        - undergraduate level since 2000
                                        - master program level since 2002
12. Research interests Health risks in work and living environment
                                  Methods for measurement of biological risk factors in the
                                  environment
13. Current research Participation in:
    program                     “Incidence of asthma and allergic diseases among estonian
                                  urban adult population. European community respiratory
                                  “Differences in home indoor climate between healthy
CURRICUM VITAE

1. Name: Taie Kaasik
2. Position: Senior Researcher (part-time)
3. Date of birth: 09.12.1934
4. Education: M.D., University of Tartu, Estonia (UT), 1960
   M.A. (social psychology), UT, 1980

5. Research and professional experience:
- Lecturer, and Head of the Department at the Nurses’ School of Tartu, 1960-1980;
- Research Associate at the Higher School Research Centre at UT, 1981-1990;
- Lecturer, Department of Public Health, UT 1991-1992;
- Assoc. Professor, Dept of Public Health, UT, 1993 -1997;
- Researcher on injuries at Karolinska Institutet, Stockholm, Sweden during sabbatic semester in 1997.
- Professor, Head of the Chair of Health Promotion, Dept of Public Health, UT, 1998-1999.
- Project manager, Dept of Public Health, UT, 2000-2001
- Part-time Senior Researcher, Dept of Public Health, UT, 2002 -

6. Academic degrees: Ph.D., University of Tartu, 1990

7. Research-administrative experience:
- Member of the Organising Committee of the NORFA Baltic Research Course on Injury Prevention and Safety Promotion held in Jurmala, Latvia, in 2000.
- Member of the Executive Committee of the European Safe Community Network, since 1999.
- Member of the International Safe Community Research Group at the WHO Collaborative Centre on Safe Communities at Karolinska Institutet, Stockholm, Sweden, since 1995.
- Member of the International Stress and Anxiety Research Society.
- Member of the Estonian Society of Physiologists.
- Member of the Council of Trauma at the Estonian Health Development Institute.

9. Dissertations advised:

10. Current research area: Causes and circumstances of injuries in Estonia
1. Name Raul-Allan Kiivet

2. Present position
   Professor, Health Care Management
   Head, Department of Public Health

3. Date of birth November 30, 1960

4. Education and academic degrees

   Karolinska Institute, Stockholm, 1999, Doctor of Medical Sciences (PhD)
   University of Tartu, 1988, Candidate of Medical Sciences (PhD)
   University of Tartu, 1985, graduated cum laude (MD) from the Faculty of Medicine

5. Professional career

   2001-2003 Adjunct Professor (10%), Nordic School of Public Health, Göteborg
   since 2000 Vice-Dean, Residency Training, Faculty of Medicine
   since 1996 Professor of Health Care Management, Department of Public Health
   since 1992 State Agency of Medicines, Senior Medical Consultant (part-time)
   1993–1996 Associate Professor in Clinical Pharmacology, Department of Pharmacology
   1991–1992 Karolinska Institute, Stockholm, Visiting Scientist
   1989–1994 Tartu Lung Clinic, physician (part-time)
   1985–1993 Research Associate, Assistant Professor in Clinical Pharmacology, Department of Pharmacology, University of Tartu

6. Research-related administrative positions

   since 2003 Council of the Baltis Sea Public Health Training Network, Chairman
   since 2002 Centre of Behavioural and Health Sciences, Member of Board
   since 2001 Estonian Academy of Sciences, Member of Council of Public Health
   since 2000 Estonian Science Foundation, Member of Expert Committee in Medicine
   since 2000 Public Health Sciences Thesis Committee, Chairman, University of Tartu

7. Administrative and other responsibilities

   since 2002 Committee on Reimbursement of Medicines, Ministry of Social Affairs
   since 2001 Tartu University Clinics, Member of the Board
   since 1999 Committee on Registration of Medicines, Ministry of Social Affairs
   since 1998 Estonian National Programme Against Tuberculosis, Vice-Chairman

8. Dissertations advised

   In 1997 Ly Rootslane and Kaidi Vendla were awarded Master of Science in Pharmacy (degree by the Faculty of Medicine, University of Tartu)
   In 2003 Katrin Kiisk and Liis Rooväli were awarded Master of Science in Public Health (degree by the Public Health Sciences Thesis Committee, University of Tartu) and Siiri Suits was awarded Master of Arts (social policy) degree by Council of Social Sciences, University of Tartu

9. Main fields of research
Health economics and pharmacoepidemiology (since 1995)
Clinical pharmacogenetics and pharmacokinetics (since 1990)
CURRICULUM VITAE

1. Name: Katrin Lang

2. Position: senior teaching assistant

3. Date of birth: 04.05.63

4. Education: MD, University of Tartu, 1988

5. Research and professional experience:
   since 1997 senior teaching assistant, Department of Public Health, University of Tartu
   1992-1997 teaching assistant, Department of Public Health, University of Tartu
   1989-1991 physician, Children’s Hospital, University of Tartu

Registered as a PhD student at the London School of Hygiene and Tropical Medicine, Department of Population Health, Epidemiology Unit since 1999.


7. Current research areas:
   - quality of cancer registration data and public health implications in Estonia,
   - alcohol related mortality in Estonia
   - deaths in children from external causes and child abuse
**CURRICULUM VITAE**

1. First name  **Kersti**  
2. Surname  **Meiesaar**  
3. Institution  University of Tartu  
   Department of Public Health  
4. Position  Associate Professor of Health Economics, Head of Chair of Health Economics  
5. Date of Birth  25 of April 1950  
6. Education  
   - econometrics and statistics, Faculty of Economics, University of Tartu (1973)  
7. Research and professional experience  
   30 years (since 1973) in University of Tartu, from that 22 years in Faculty of Economics and last 8 years (since 1996) in Faculty of Medicine, in current position.  
8. Academic degree  PhD in Economics  
9. Administrative experience  Head of Chair of Health Economics  
11. Research interests  
   - Health risks in work and living environment  
   - Methods for measurement of biological risk factors in the environment  
12. Main areas of scientific interest:  
   a) economic evaluation of health care reforms and processes,  
   b) economical and statistical analysis of temporary disability of workers,  
   c) effectiveness of using labour resources and working time.
CURRICULUMM VITAE

1. First Name  Eda
2. Surname     Merisalu
3. Institution Department of Public Health
4. Position    Associate professor
5. Date of birth 06.01.1955
6. Education  Faculty of Sports Medicine, University of Tartu, 1995
7. Research and professional experience
   Institute of General and Molecular pathology,
   TU - lab. assistant (1985-1990); researcher
   (1990-1993); Senior researcher (1993-1995);
   Department of Public Health, TU - assistant-
   lecturer (1995-1997); Ass. professor (1997-
   2003).
9. Dates and sites of earning the degrees 1995, Kaunas Medical Academy, Lithuania
10. Research-administrative experience
    ISIS member, 1997; SOP member 1999,
    member of the Board of the Dept of Nursing
    Sciences 1999; STAR member 2001
    1997-2003 supervised/defended 8 Bach. thesis
    in the Nurs Sciences and 1 master thesis in the
    Soc Sciences
11. Supervised dissertations
12. Current research program
    Occupational and environmental health
CURRICULUM VITAE

Name: Kersti Pärna

Position: senior lecturer

Date of birth: 15.02.1960

Education:
MPH (1997) - “Smoking and associated factors among adolescents in Tallinn (Estonia)”, Department of General Practice and Community Health, University of Kuopio, Finland
MD (1984) - Department of Sports Medicine, Faculty of Medicine, University of Tartu, Estonia
1984-1985 postgraduate student of University of Tartu
1978-1984 Faculty of Medicine, University of Tartu

Professional experience:
since 1998 senior lecturer, Department of Public Health, University of Tartu
1992-1998 lecturer, Department of Public Health, University of Tartu
1984-1992 sports physician by basketball team of Estonia

Academic degrees:

Current research areas:
Socioeconomic differences in smoking
CURRICULUM VITAE

1. **Family name:** PÕLLUSTE
2. **First name:** KAJA
3. **Date of birth:** 05/02/1967
4. **Professional education:**
   - University of Tartu 1990 Medical doctor
   - Nordic School of Public Health 1996 Diploma of Public Health
   - Nordic School of Public Health 2000 Master of Public Health
5. **Professional Experience**
   - University of Tartu, senior assistant of health care management (0,5) Since Feb 1st, 2002
   - University of Tartu, project manager (0,5) Feb 1st-Dec 31st, 2002
   - University of Tartu, senior assistant of health care management 1992 – 2002
   - University of Tartu, assistant of health care management 1990 – 1992
   - Ministry of Social Affairs, project manager Feb-Dec, 2002
   - Ministry of Social Affairs, expert Apr-Dec, 2003
6. **Main research area**
   - Quality assurance in health care
   - Evaluation of health systems
7. **Total number of publications 57.**
8. **Research-administrative experience**
   - Member of the board of Estonian College of Health Care Executives 1997 - …
   - Member of working group for establishing a certification program for health care administrators in Estonia 1999 - …
   - Member of working group “Development of the Quality Policy of Estonian Health Care” in the Ministry of Social Affairs of Estonia 1996-1998
CURRICULUM VITAE

1. **Name**  
   **LIIS ROOVÄLI** (formerly Nirk)

2. **Position**  
   Research Associate

3. **Date of birth**  
   25.08.1968

4. **Education**  
   1999–2003  
   Nordic School of Public Health (Sweden), Diploma in Public Health
   1999–2002  
   University of Tartu, MSc course in public health
   1997–1999  
   University of Tartu, residency in health care management
   University of Tartu, internship as general physician
   1986–1992  
   University of Tartu, Department of Medicine
   1990–1991  
   Medical University of Lübeck, four-month student exchange program

5. **Research and professional experience**  
   Since 2001  
   Department of Public Health, University of Tartu, Research Associate;
   May 2001–Jan 2002  
   Estonian Ministry of Social Affairs, Project “Continuing medical education and retraining needs assessment”, Project manager;
   May 2001 – Jan 2002  
   Estonian Health Insurance Fund, Project “Developing the record of performance for hospitals”;
   Feb–April 2000  
   Statistical Office of Estonia, Population and Housing Census 2000, Supervisor of enumerators;
   May–Nov 1998  
   Estonian Ministry of Social Affairs, Danish Health Consult A/S "Hospital Assessment Project", Local consultant and project manager;
   Hospital of Pelgulinna and Hospital of Maarjamõisa, intern;

6. **Academic degree**  
   MScPH (University of Tartu, 2003)

7. **Honors, awards**  
   Diploma for master thesis in national research competition, 2003

8. **Research-administrative experience**  
   Since 2002 member of the Centre of Behavioural and Health Sciences.
   Since 1998 member of Estonian College of Health Care Executives.

9. **Dissertations advised** -

10. **Research areas**  
    - Analyzed Sick Fund’s and public sector's spending to illnesses.
    - Surveyed performance of Estonian hospital network.
    - Current research is mainly focused on health care services need, utilization, efficacy and accessibility during the health care system reforms.
CURRICULUM VITAE

5. **Family name**: SAAVA
6. **First name**: ASTRID
7. **Date of birth**: 25/02/1938
8. **Nationality**: Estonian
9. **Civil status**: Single
10. **Professional education**:
    University of Tartu, 1962, Medical doctor
    University of Tartu, 1967, Candidate of Med. Sci (PhD)
    University of Tartu, 1974, Doctor of Med. Sci

7. **Professional Experience**
   University of Tartu, *professor emeritus* 2003 - ….
   University of Tartu, prof.of environmental and occup. health 1998 - 2003
   University of Tartu, prof.of public health, head of Depart.of PH 1992 – 1998
   University of Tartu, prof., head of Depart.of Hygiene 1990 – 1992
   University of Tartu, prof.of hygiene 1987 – 1990
   Estonian Institute of Development Management, prof. 1979 – 1987
   Tallinn Technical University, head of department 1974 – 1980
   Tallinn Technical University, sen. researcher 1970 – 1974
   University of Tartu, lecturer of Depart.of Hygiene 1962 - 1970

8. **Honors, awards**
   • 1998 Medal of Medical Faculty
   • 1988 Thanksgiving from the Ministry of Environment
   • 2003 Medal of the University of Tartu

9. **Main research areas**
   • Public health aspects of using and protection of water resources in Estonia
   • Microbiology of Baltic Sea
   • Public health development in Estonia
   • Environmental health risks in Estonia
   Total number of publications about 200.

10. **Research-administrative experience**
    Advisory Group member of BRIMHEALTH-Partnership 1994 - ….
    Member of the Methods Task Team and the Baltic Sea sub-regional 2001 - ….
    Team of Global International Water Assessment (GIWA)
    Member of the Leading Committee of the Public Health foundation 1998 - ….
    Member of the Committee on Medical Terminology 1990 - ….
    President of the Tartu Association of Health Protection Specialists 1988 - ….
    Public health advisor at the Ministry of Social Affairs 1996 - 2001
    Member of Governmental Commission of Sustainable Development 1996 - 1999
    Member of the *ad hoc* Group of Experts on the Assessment of the State of the Baltic Sea
CURRICULUM VITAE

1. First Name          Argo          
2. Surname             Soon          
3. Institution         Department of Public Health, University of Tartu 
4. Position            senior lecturer 
5. Date of birth       15.04.1965 
6. Education           University of Tartu, Faculty of Medicine 1992 
7. Research and        University of Tartu, Department of Public Health, lecturer 1992-1997 and senior lecturer since 1997 
                      professional experience 
8. Academic degree     Master of Public Health 
9. Dates and sites of  The Joseph H. and Belle R. Braun Hebrew University-Hadassah School of Public Health and Community Medicine, Jerusalem, Israel, 12.02.1997 
                      earning the degrees
11. Research-administrative experience Member of Estonian Society of Toxicology; Member of Estonian Scientific Society of Health Protection; Member of International Society of Indoor Air Quality and Climate (ISIAQ), Member of the International Society of the Built Environment 
12. Current research   Quality of indoor air and indoor environment, its influence on human health 
program
CURRICULUM VITAE

Name: ANNELI UUSKÜLA

Position: Researcher, Department of Public Health, University of Tartu
        Senior Assistant, Department of Dermatology, University of Tartu
        Physician, Clinic of Dermatology, Foundation of Tartu University Clinics

Year of birth: 1967

Education:
2001-2002 State University of New York, University at Albany, School of Public Health, MS degree in epidemiology (MSc)
1997-2001 Tartu University, Medical Doctorancy (PhD)
1993-1997 Tartu University, Medical Residency in Dermatovenerology
1991-1993 Tartu University, Medical Internship
1991-1994 Tartu University, Medical Faculty (MD)
1991-1995

Professional experience:
2004 – Senior Assistant, Department of Dermatology, University of Tartu
2001 – since, Researcher, Department of Public Health, University of Tartu
2000 – since, Physician, Clinic of Dermatology, Foundation of Tartu University Clinics

1999 – since, clinical expert for dermatovenerology, State Agency of Medicine

Academic degree: M.S., Ph.D.

Research-administrative experience:

Completed research support:

71
Membership in scientific associations:

New York Academy of Sciences, since 1997
International Union Against Sexually Transmitted Infections
Estonian Society of Dermatovenerology (member of the board)
Estonian Union Against Sexually Transmitted Infections (EUSTI, member of the board)

Conferences and symposia organised:

4th Congress of Baltic Association of Dermatovenerology, 2003

Ongoing Research support:

2004 Advanced In-Country Training Grant Fogarty International Training and Research Program at SUNY Downstate Medical Center. Principal investigator.
Annex 5: Participation of the staff in international training courses in 2001-2003

Diva Eensoo

• Health Ethics. Nordic School of Public Health and Vilnius University, March 5-16, 2001, Vilnius, Lithuania.
• Foundation of Health Promotion. Nordic School of Public Health and Riga Stradins University, September 10-21, 2001, Riga, Latvia.

Krista Fischer


Maarike Harro

• International Visitor’s Programme of the North-Karelia Project in Finland. National Public Health Institute of Finland, January 15-19, 2001, Helsinki-Joensuu, Finland.
• CINDI Winter School. National Public Health Institute of Finland, January 22-26, 2001, Helsinki, Finland.
• Logistic regression. Department of Public Health, University of Helsinki, April 17-20, 2001, Helsinki, Finland.
• Multilevel analysis in health service research. Department of Public Health, University of Helsinki, May 28-June 1, 2001, Helsinki, Finland.
• Frameworks for health promotion effectiveness. University of Tampere, School of Public Health, June 11-12, Tampere, Finland.
• Evaluation related to occupational safety and health interventions. May 13-17, 2002, Copenhagen, Denmark.

Ene Indermitte

• Introduction to Food and Airborne Fungi. October 6-10, 2003, The Centraalbureau voor Schimmecultures, Institute of the Royal Academy of Arts and Sciences (KNAW), Netherlands.
• Toxicology, Ecotoxicology and Risk of Chemicals. February 17-22, 2003, University of Uppsala, Sweden.
• Social and Behavioural Sciences. November 24-December 5, 2003, Nordic School of Public Health and MAPS, St Petersburg, Russia.

Taie Kaasik


Kersti Meiesaar

• Seminar and supervision for master students. The Nordic School of Public Health, April 2-7, 2001, Göteborg, Sweden.
• Teamwork and Intersectoral Care. Nordic School of Public Health, April1-12, 2002, Göteborg, Sweden.

Eda Merisalu

Liis Rooväli
• *Public Health Science, Part 2*. Nordic School of Public Health and Kaunas Medical University, April 30-May 11, 2001, Kaunas, Lithuania.
• *Health Policy, Planning and Management*. Nordic School of Public Health and University of Tartu, May 28-June 8, 2001; Tartu-Tallinn, Estonia.
• *Observatory Summer School Public Health and Health Services: Managing the Interface*. European Observatory on Health Care Systems, August 26-30, 2001; Dubrovnik, Croatia.
• *Epidemiology*. Nordic School of Public Health, December 3-14, 2001; Göteborg, Sweden.
• *Qualitative and Quantitative Research Methods in Public Health*. Nordic School of Public Health, October 14-25, 2002, Krakow, Poland.
• *Advanced Flagship Course on Poverty, Equity and Health Systems*. The World Bank Institute and The Health Services Management Training Centre, Semmelweis University, August 31-September 5, 2003; Budapest, Hungary.

Kaja Põlluste
• *Health systems and services research*. Nordic School of Public Health, August 26-September 6, 2002, Göteborg, Sweden.
Kersti Pärna

- *Multilevel Analysis in Health Service Research.* University of Tampere, October 27-31, 2003, Tampere, Finland.
- *Systematic Reviews and Meta-analysis.* University of Helsinki, March 31-April 3, 2003, Helsinki, Finland.
- *Statistical Model Comparison Methods.* University of Helsinki, February 10-14, 2003, Helsinki, Finland.

Argo Soon

- *Summer Institute for Rural and Environmental Health.* June 17-18, 2002, University of Trnava, Slovak Republic.
- *First International Course on Computer Work.* NIVA, October 7-11, 2002, Copenhagen, Denmark.

Anneli Uusküla


Training of trainers course organised by the University of Tartu, August 28-September 06, 2003

Eligibility requirements for candidates – Professor

1. The candidate will hold a Ph.D. awarded by an Estonian academic institution, or other equivalent academic degree.
2. The candidate will be competent to oversee the research (or creative professional work) of the chair and direct the chair’s programmes of graduate study (above all doctoral studies). He/she will be qualified to teach the subjects offered at the chair on all academic levels and supervise the teaching conducted at the chair. The professorial candidate will be capable of directing the work of the chair and contributing to the development of his/her speciality in Estonia.
3. A competent candidate will have conducted internationally recognised research in his/her speciality (or closely related field) equivalent to at least three doctoral dissertations.
4. The candidate will be consistent in his/her research activities, having within the 5 years preceding candidacy published internationally recognised work equivalent to at least one doctoral dissertation.
5. The candidate is expected to be successful in securing and administrating research grants.
6. Candidates applying for positions entailing teaching responsibilities must present a venia legendi and provide proof of teaching experience in an establishment of higher education equivalent in scope and level to at least two years’ work in an Associate Professor’s position, including experience of supervising the work of graduate students (ideally also doctoral students).
7. A good candidate will have experience in compiling textbooks or monographs, including those intended for undergraduate (full-time) students.
8. A good candidate will have administrative and organisational experience.
9. Where a candidate stands for re-election, the expert assessors and the Faculty Council will thoroughly analyse and assess the candidate’s work in heading and developing the chair (especially as regards the organisation of graduate studies and the facilitation of the growth of young academics) during the 5 years preceding candidacy. The Professor will have supervised successfully defended Master’s and Doctoral theses and maintained an acceptable performance of graduate studies at the chair. Exemptions from this rule may be granted by the Academic Committee of the University Council.

Professional requirements for candidates - Associate Professor

1. The candidate will hold a Ph.D. awarded by an Estonian academic institution, or other equivalent academic degree.
2. The candidate should be an independent researcher. He/she will be capable of directing the work of master and doctoral students, also younger teachers and researchers. He/she will be qualified to teach the subjects offered at the chair on all academic levels and to manage the teaching conducted at his/her disciplines.
3. A competent candidate will have conducted internationally recognised research in his/her speciality (or closely related field) equivalent to at least two doctoral dissertations.
4. The candidate will be consistent in his/her research activities, having within the 5 years preceding candidacy published internationally recognised work equivalent to at least 2/3 of doctoral dissertation.
5. The candidate is expected to be successful in securing and administrating research grants.
6. Candidates applying for positions entailing teaching responsibilities must present a *venia legendi* and provide proof of teaching experience in an establishment of higher education equivalent in scope and level to at least two years’ work in an Senior Assistant’s position, including experience of supervising the work of postgraduate students.
7. A good candidate will have experience in compiling textbooks.
8. A good candidate will have administrative and organisational experience.
9. Where a candidate stands for re-election, the expert assessors will thoroughly analyse and assess the candidate’s work during the 5 years preceding candidacy. The Associate Professor will have supervised successfully defended Master’s theses.

**Professional requirements for candidates - Senior Assistant**

1. The candidate will hold a Master’s degree awarded by an Estonian academic institution, or other equivalent educational level.
2. Candidates applying for positions will provide teaching in two first levels of higher education, including and supervising the work of students of basic studies.
3. The candidate will be consistent in his/her research activities, having published internationally recognised scientific work equivalent to at least 2/3 of doctoral dissertation.
4. Candidates applying for positions entailing teaching responsibilities must provide proof of teaching experience in an establishment of higher education equivalent in scope and level to at least two years’ work in an Assistant’s position. Experience of supervising the work of students is recommended.
5. Where a candidate stands for re-election, the candidate’s work during the 4 years preceding candidacy will thoroughly be analysed. The Senior Assistant will have successfully supervised students.

**Professional requirements for candidates - Assistant**

1. The candidate will hold a Bachelor’s degree awarded by an Estonian academic institution, or other equivalent academic educational level.
2. Candidates applying for positions will be competent in his/her speciality to teach in the first level of higher education (seminars, practical exercises), and also take part in research work of the chair.
3. Where a candidate stands for re-election, the candidate’s teaching and research work during the 3 years preceding candidacy will be analysed. During last three years he/she should have published internationally recognised scientific work equivalent to at least 1/3 of doctoral dissertation.
1. **What is the most suitable answer characterising your present activities?** Choose *only one answer.*
   1. I am working
   2. I am studying
   3. I am working and studying
   4. I am currently unemployed and not studying
   5. Other, specify ........................................

2. **Were you working during your master studies?**
   1. I was working full-time
   2. I was working part time
   3. I was working in different workplaces
   4. I was working occasionally
   5. I was NOT working

*Following questions concern work that you have been doing after completion of master studies. If you have worked in several jobs, please answer about the job you are doing at present.*

3. **Please characterise your work**
   - Work is closely related to master studies
   - Work is partly related to master studies
   - Work is NOT related to master studies

4. **Are you working:**
   1. In state-owned or municipal institutions
   2. In my private company
   3. In some other private company
   4. At the service of private person
   5. As an undertaker (F.I.E)
   6. Other, specify .................................

5. **Are you working currently  ...**
   1. Full-time
   2. Part-time
   3. In several places
   4. Other, specify .................................
6. Please write the field of activity of the institution/company you are currently working and your position
   
   1. Field of activity of institution ........................................
   2. Position .................................................................

7. How did you find your job after the completion of master studies?
   Mark only one answer.
   
   1. I was working in the company during my master studies and I am continuing working at the same place
   2. I got the job through my relatives or acquaintances
   3. I got the information about the job from advertisements (TV, radio, magazines etc.)
   4. I was asking for jog directly from the company
   5. I got the job through employment agency
   6. I got the job through personnel searching company
   7. Other, specify .........................................................

8. Are you satisfied with your present job?
   
   1. Yes, I am satisfied
   2. I am thinking of changing the job
   3. I am actively searching for new job possibilities
   4. Difficult to say

Questions concerning your master studies

9. Why did come to study in master of public health programme?
   
   1. I was feeling need for self-improvement
   2. It was suggested/insisted by my boss
   3. I wanted to change my specialty/job
   4. I wanted to have bigger salary/better salary conditions
   5. Colleagues/friends recommended
   6. Other, specify ...........................................................
10. Considering your post-graduate experience at work, please give your general opinion about following aspects of master studies. *Circle suitable number.*

<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Very poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Organisation of studies</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>Relevant subjects in the curriculum</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Balance between different subjects</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Balance between active learning and independent work</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>Level of teaching subjects</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>F</td>
<td>Skills of lecturers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>Knowledge about modern theories by lecturers</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>Teaching of practical skills</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>I</td>
<td>Supervising of individual/seminar works</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>J</td>
<td>Supervising of master thesis</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Please comment your answers:

……………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………
……………………………………………………………………………………………………………………

11. To what extent did you acquired knowledge/skills from master studies that are useful in your current work?

- Yes, in big extent
- Yes, partly
- Almost nothing

12. Would you recommend master of public health studies to other people (colleagues, friends)?

- Yes
- No

13. If you had to start over again, would you want to pass master studies again?

- Yes
- No

14. What has master degree given to you?

- 1 Increase in self-reliance
- 2 Increase in authority/respect of colleagues
- 3 Increase in salary
- 4 Better job position
- 5 Change of specialty/job
- 6 Other, specify ……………………………………………………………
15. Do you feel the need for cooperation between following specialists in the field if public health in your everyday work?

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>Partly</th>
<th>No</th>
<th>I don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Protection</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Health promotion</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Health care management</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Health care economics</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Epidemiology and biostatistics</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

16. Please give your opinion in a 5 point-scale, about the importance of following subjects in your current job. Circle suitable number.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Very important</th>
<th>Not important</th>
<th>Difficult to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations of public health</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Environmental and occupational health</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Health sociology</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Epidemiology and biostatistics</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Practical assignment</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialties</th>
<th>Very important</th>
<th>Not important</th>
<th>Difficult to say</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles and methodology of risk analysis</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>The influence of the chemical and physical factors on the environment</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Biological factors in the environment</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Environmental epidemiology</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Risk factors in the food, drinking water and air: influence on the human organism, methods of analysis</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Environmental health policies and strategies</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Legislation in Estonia and in EU</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
</tbody>
</table>
17. Please give your opinion in a 5 point-scale, about the quality of following subjects. 
   *Circle suitable number.*

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Very important</th>
<th>Not important</th>
<th>Difficult to say</th>
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<td>3</td>
</tr>
<tr>
<td>Practical assignment</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>Specialties</strong></td>
<td></td>
<td></td>
<td></td>
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<td>Legislation in Estonia and in EU</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

18. Please name 3 subjects from master studies that are most important for your work?
   ........................................................................................................
   ........................................................................................................
   ........................................................................................................

19. Please name 3 subjects from master studies that are LEAST important for your work?
   ........................................................................................................
   ........................................................................................................
   ........................................................................................................

20. What subjects were you missing most and what subjects should be included in the master studies?
   ........................................................................................................
   ........................................................................................................
   ........................................................................................................
21. Was the regular form of active learning (2-3 days-cycle twice a month) suitable for you?
   Yes       No

22. Was the access to the computers sufficient for learning purposes?
   1  During the active learning period  Yes       No
   2  At work or at home              Yes       No

23. Were textbooks and other learning materials available?
   Yes       No

24. Were the copying possibilities for learning purposes sufficient at the department?
   Yes       No

25. Were the teaching rooms suitable for learning purposes?
   Yes       No

26. Was the information about master studies sufficient (timetables, changes etc.)?
   Yes       No

27. Did lecturers/supervisors have enough time for consultations?
   Yes       No

28. Did you receive enough help/support from lecturers and other staff members during your studies?
   Yes       No

29. What kind of accommodation possibilities did you use during master studies?
   1  I live/was living in Tartu
   2  I stayed at my relatives or friends homes
   3  I was in a hotel
   4  I used university dormitory
   5  I went home every evening
   6  Other, specify  …………………………………

30. Do you agree to take part/consult about improving and development of master public health programme?
   Yes       No

You are very welcome to write your thoughts, suggestions, recommendations about the master studies that will enable us to better organise master studies and increase the quality and effectiveness of studies:
………………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………………

Thank you!
Annex 8: Curriculum of Master of Public Health

Master of Public Health (MPH)

Curriculum until 2002
Code 7509902

Training courses in public health (60 credits):

1. Core modules (15 credits):

<table>
<thead>
<tr>
<th>Code</th>
<th>Title of the subject</th>
<th>No of credits</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH.01.078</td>
<td>Foundations of public health</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.077</td>
<td>Environmental and occupational health</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.04.019</td>
<td>Health sociology</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.02.022</td>
<td>Human physiology and ecology</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.03.011</td>
<td>Epidemiology and biostatistics</td>
<td>3</td>
<td>pass/fail</td>
</tr>
</tbody>
</table>

2. Special modules (taken according to the chosen sub-speciality)

2.1 Special module II – Environmental Health, Health Protection, Epidemiology of Infectious Diseases (20 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title of the subject</th>
<th>No of credits</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH.01.064</td>
<td>Principles and methodology of risk analysis</td>
<td>2</td>
<td>pass/fail</td>
</tr>
<tr>
<td>FKFE.05.077</td>
<td>The influence of the chemical and physical factors on the environment</td>
<td>4</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.01.065</td>
<td>Biological factors in the environment</td>
<td>2</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.066</td>
<td>Environmental epidemiology</td>
<td>4</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.067</td>
<td>Risk factors in the food, drinking water and air: influence on the human organism, methods of analysis</td>
<td>4</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.068</td>
<td>Environmental health policies and strategies</td>
<td>2</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.069</td>
<td>Legislation in Estonia and in EU</td>
<td>2</td>
<td>pass/fail</td>
</tr>
</tbody>
</table>

2.2 Special module III – Health Policy, Management and Administration, Medical Law (20 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title of the subject</th>
<th>No of credits</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH.02.023</td>
<td>Health policy and health systems</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.02.024</td>
<td>Quality management</td>
<td>2</td>
<td>pass/fail</td>
</tr>
<tr>
<td>MJIV.03.076</td>
<td>Human resources management</td>
<td>2</td>
<td>pass/fail</td>
</tr>
<tr>
<td>MJRI.07.085</td>
<td>Foundations of economics</td>
<td>4</td>
<td>exam</td>
</tr>
<tr>
<td>OIOE.05.022</td>
<td>Occupational law</td>
<td>2</td>
<td>exam</td>
</tr>
<tr>
<td>OIOE.01.021</td>
<td>Medical law</td>
<td>1</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.05.006</td>
<td>Health economics</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td>SOAH.01.001</td>
<td>Public administration and social policy</td>
<td>3</td>
<td>exam</td>
</tr>
</tbody>
</table>

The total number of credits (core and special modules): 35
The core modules (15 credits) are obligatory for all MPH students. The special module (20 credits) will be chosen according to the student’s speciality.
3. Elective courses – 2 credits (exam, assessment on a pass/fail basis)

4. Practical assignment – 20 credits (assessment on a pass/fail basis)

5. Professional exam – 3 credits

6. Master thesis (20 credits)
   • independent research work and writing the MPH thesis

The thesis is defended at a public disputation.

Master of Public Health (MPH)
Curriculum since 2002
Code 7509903

The current curriculum of MPH was introduced in 2002 and the main difference from the previous one is that no practical assignment is included in academic curricula. Instead, more emphasis is paid to core disciplines in public health.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title of the subject</th>
<th>No of credits</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARTH.01.081</td>
<td>Foundations of public health</td>
<td>5</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.01.082</td>
<td>Environmental and occupational health</td>
<td>5</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.04.017</td>
<td>Health sociology</td>
<td>5</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.02.042</td>
<td>Human physiology and ecology</td>
<td>5</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.02.043</td>
<td>Planning of research project</td>
<td>4</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.02.044</td>
<td>Research seminar</td>
<td>3</td>
<td>pass/fail</td>
</tr>
</tbody>
</table>
2. Special module (24 credits)

2.1. Environmental Health

ARTH.01.083 Principles and methodology of risk analysis 4 pass/fail
FKFE.05.077 The influence of the chemical and physical factors on the environment 4 exam
ARTH.01.084 Biological factors in the environment 4 pass/fail
ARTH.01.066 Environmental epidemiology 2 exam
ARTH.01.067 Risk factors in the food, drinking water and air: influence on the human organism, methods of analysis 4 exam
ARTH.01.085 Environmental health policy and strategies 4 pass/fail
ARTH.01.069 Environmental health legislation in Estonia and in EU 2 exam

2.3. Health management

ARTH.02.045 Health policy and health systems 5 exam
ARTH.02.046 Quality management 3 pass/fail
MJIV.03.076 Human resources management 2 pass/fail
MJRI.07.085 Foundations of economics 4 exam
OIOE.05.022 Occupational law 2 exam
OIOE.01.021 Medical law 1 pass/fail
ARTH.05.005 Health economics 3 pass/fail
SOAH.01.001 Public administration 4 exam

The total number of credits (core and special modules): 56
The core modules (32 credits) are obligatory for all MPH students. The special module (24 credits) will be chosen according to the student’s speciality.

3. Elective courses - 4 credits (exam or assessment on a pass/fail basis)

4. Master thesis - 20 credits

Independent research work and writing the MPH thesis
The thesis is defended at a public disputation.
Annex 9: Curriculum of Master of Sciences of Public Health

Master of Science in Public Health (M.Sc.P.H.)
Curriculum
Code 7509901

Title of the curriculum: Public Health
Curriculum in Estonian: Rahvatervis
The duration of the nominal study time: 2 years (80 CP)
The objective of training: The aim of Master’s studies is to provide knowledge and experience for individual research work in public health area and as a specialist of public health.
Scientific degree given in English: Master of Science in Public Health (M.Sc.P.H.)
Scientific degree in Estonian: Teadusmagister (rahvatervis) (MSc)
Accreditation of the curriculum: yes, conditionally in 2001

Short annotation of Curriculum:
The Curriculum consists of studies (18 CP) and individual research (62 CP), which is based on the Chairs of the Department of Public Health in the Faculty of Medicine. Study program involves compulsory and elective subjects according to individual study plan. Study plan is based on research topic and previous educational background of Master student. After completion of Curriculum and successful defense of Master’s thesis the graduate is granted the degree of Master of Science in Public Health.

Plan of the curriculum (80 CP):
Master studies
1. Public Health 5 CP
2. Master’s seminar: two presentations about own research work with an overview of scientific literature 4 CP
3. One scientific publication in international peer-reviewed journal 9 CP
4. Preparation and defense of research grant application 3 CP
5. Elective courses 4 CP
6. Specialty subject 5 CP

Master’s thesis: Writing of Master’s thesis and public defense 50 CP

The specialty areas, where graduate can do individual research and give a specialty exam are: Epidemiology and Biostatistics, Sociology of health, Environmental Health, Occupational health, Health care management, Health economics.
The Program of Public Health exam consists of other public health subjects except specialty subject.
### Master of Science in Public Health (M.Sc.P.H.)

**Curriculum**

**Code 7509901**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title of the subject</th>
<th>No of credits</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>1. Master studies (30 CP)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH.01.054</td>
<td>Public Health</td>
<td>5</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.01.057</td>
<td>Master’s seminar: two presentations about own research work with an overview of scientific literature</td>
<td>4</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.058</td>
<td>One scientific publication in international peer-reviewed journal</td>
<td>9</td>
<td>pass/fail</td>
</tr>
<tr>
<td>ARTH.01.056</td>
<td>Preparation and defense of research grant application</td>
<td>3</td>
<td>pass/fail</td>
</tr>
<tr>
<td></td>
<td>Specialty subject (Chosen one of the following):</td>
<td>5</td>
<td>exam</td>
</tr>
<tr>
<td>ARTH.01.055</td>
<td>Environmental and Occupational Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH.02.018</td>
<td>Health Care Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH.03.010</td>
<td>Epidemiology and Biostatistics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH.04.017</td>
<td>Sociology of Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARTH.05.005</td>
<td>Health Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective courses</td>
<td>4</td>
<td>exam or pass/fail</td>
</tr>
</tbody>
</table>

**2. Master’s thesis (50 CP)**

ARTH.01.083 Independent research work, writing and public defense of Master’s thesis

*Evaluated as:
Cum laude,
approbatur optime or approbatur.*
<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Year of Birth</th>
<th>Date of Defence</th>
<th>Title</th>
<th>Supervisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diva Eensoo (MSc)</td>
<td>1963</td>
<td>May 23, 2000</td>
<td>Association of physical activity with mental health and personality.</td>
<td>Jaanus Harro(^1)</td>
</tr>
<tr>
<td>2</td>
<td>Karin Lilienberg (MSc)</td>
<td>1961</td>
<td>June 03, 2002</td>
<td>The anthropometrical data and their relation to plasma lipids and arterial blood pressure in the studies of Tallinn schoolchildren in 1984-86 and 1998-99.</td>
<td>Merileid Saava(^2)</td>
</tr>
<tr>
<td>3</td>
<td>Liis Merenäkk (MSc)</td>
<td>1973</td>
<td>June 03, 2002</td>
<td>Alcohol and illicit drug consumption in relation to platelet monoamine oxidase activity and personality traits in schoolchildren.</td>
<td>Maarike Harro, Jaanus Harro</td>
</tr>
<tr>
<td>4</td>
<td>Anneli Zirkel (MSc)</td>
<td>1972</td>
<td>June 03, 2002</td>
<td>Drug and alternative medicine usage among Estonian population.</td>
<td>Jaanus Harro</td>
</tr>
<tr>
<td>5</td>
<td>Valentina Orav (MPH)</td>
<td>1966</td>
<td>June 17, 2002</td>
<td>The characterisation of sanitary conditions and quality of water in swimming pools in Tartu city.</td>
<td>Astrid Saava</td>
</tr>
<tr>
<td>6</td>
<td>Katrin Kiisk (MPH)</td>
<td>1973</td>
<td>April 10, 2003</td>
<td>Managing changes in aspects of organizational culture, role of leaders and evaluation of alternatives by transferring Lung Clinic of University of Tartu to another building as an example.</td>
<td>Raul Kiivet</td>
</tr>
<tr>
<td>7</td>
<td>Mare Remm (MPH)</td>
<td>1954</td>
<td>June 9, 2003</td>
<td>Prevalence of helminthiases among the children of kindergartens in Tartu region and the factors affecting it.</td>
<td>Astrid Saava, Matti Maimets(^3)</td>
</tr>
<tr>
<td>8</td>
<td>Liis Rooväli (MSc)</td>
<td>1968</td>
<td>June 9, 2003</td>
<td>Accessibility and utilization of inpatient care in Estonia: demographic variations and effect of distance</td>
<td>Raul Kiivet</td>
</tr>
<tr>
<td>9</td>
<td>Krystiine Liiv (MSc)</td>
<td>1975</td>
<td>June 9, 2003</td>
<td>Association between smoking and personality in adolescents.</td>
<td>Maarike Harro</td>
</tr>
<tr>
<td>13</td>
<td>Mihhail Muzotsin (MPH)</td>
<td>1959</td>
<td>June 19, 2003</td>
<td>Fluor content in the drinking water of Pärnu catchment area, analysis of potential health hazards and potential management of risks.</td>
<td>Astrid Saava, Heino Lutsoja(^4)</td>
</tr>
<tr>
<td>No</td>
<td>Name</td>
<td>Year of Birth</td>
<td>Date of Defence</td>
<td>Title</td>
<td>Supervisor</td>
</tr>
<tr>
<td>----</td>
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<td>----------------------------------------------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>14.</td>
<td>Mai Vaht (MSc)</td>
<td>1967</td>
<td>June 9, 2004</td>
<td>Natural UV radiation on the Pärnu beach and its effect on the lymphocyte subsets.</td>
<td>Ülle Kikas&lt;sup&gt;5&lt;/sup&gt;, Kai Kisand&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
<tr>
<td>15.</td>
<td>Irina Filippova (MPH)</td>
<td>1965</td>
<td>June 9, 2004</td>
<td>Patient dose survey in x-ray radiography.</td>
<td>Antti Servomaa&lt;sup&gt;7&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>1</sup>Department of Psychology, University of Tartu  
<sup>2</sup>Estonian Institute of Cardiology  
<sup>3</sup>Clinic of Internal Medicine, Tartu University Clinics  
<sup>4</sup>Health Protection Inspectorate  
<sup>5</sup>Institute of Environmental Physics, University of Tartu  
<sup>6</sup>Department of General and Molecular Pathology, University of Tartu  
<sup>7</sup>Radiation and Nuclear Safety Authority, Finland
Annex 11: Published research papers of the Department 2001-2004

(CC and ISI Web of Science)

2004 and in press


2003


2002


