

# Reports on the pilot evaluations of the Nordic Master's Degree Programmes in Gerontology – NordMaG and Plant Pathology – NorPath



**Prepared as part of the project Joint Programmes – Joint Evaluations for the Nordic Network for Quality Assurance and the Nordic Council of Ministers**

**Report on the pilot evaluations of the Nordic Master's Degree Programmes in Gerontology – NordMaG and in Plant Pathology - Nor-Path**

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# Preface

The present report is part of a NOQA (Nordic Quality Assurance Network in Higher Education) project funded by the Nordic Council of Ministers to develop a model of joint quality assurance of Nordic joint master's programmes. That project, in turn, is motivated by a larger ambition to support the development of such programmes in order to promote Nordic cooperation in higher education at master's level and promote Nordic higher education outside the Nordic countries. To this end six programmes received development funding in 2007 and two of them welcomed their first students in the autumn of 2008.

These reports have two main aims. One is to provide feedback to the programmes on their progress so far. The other is to test methods and criteria of evaluating joint master's programmes with the ultimate goal of proposing a model of joint evaluation in the Nordic higher education area. The results of that effort are presented in a final report presented to the Nordic Council of Ministers in September 2009.

The evaluations were carried out in accordance with the principles of the ENQA Standards and Guidelines for Quality Assurance in the European Higher Education Area. Thus, among other things, the programmes produced and delivered self-evaluations and a panel of assessors conducted site visits to all the institutions involved in their delivery. The panels included the following persons:

## **NordMaG**

Katri Vehviläinen-Julkunen, Professor, University of Kuopio  
Stefan Fors, PhD student, Stockholm University/Karolinska Institute  
Kirsi Hiltunen, Finnish Higher Evaluation Council  
Karin Järplid Linde, Swedish National Agency for Higher Education  
Staffan Wahlén, Swedish National Agency for Higher Education

## **NorPath**

Anna Stina Sandelius - Professor, University of Gothenburg, Sweden  
Gerhard Y. Amundsen - NOKUT  
Vibeke Fahlén – ACE Denmark  
Kristine Als Velling – Danish Evaluation Institute (EVA)

We would like to express our sincere thanks to all those at the five institutions who planned and participated in the site visits for all their efforts.

On behalf of the panels of assessors  
Staffan Wahlén, Chair of the Joint Master's Project

# Nordic Master's Degree Programme in Gerontology - NordMaG

The Nordic Master's Degree Programme in Gerontology – NordMaG, is the result of a collaboration of three universities – the University of Jyväskylä (JyU, the coordinating institution), the University of Lund (UL) and the University of Iceland (UI). It describes itself as a “multidisciplinary and jointly implemented degree programme ... (which) qualifies graduates for employment e.g. in the fields of administration, development, education and research”<sup>1</sup>. An Agreement was signed by the Vice-Chancellors or rectors of the three universities in 2008. This is a fundamental document which establishes the extent of collaboration between the institutions. It also ensures a certain amount of sustainability in that it is valid for four years.

The three universities offer different specialisations reflecting the research and teaching of the departments involved, and students are admitted and enrolled at one of them, which also awards the degree. The specialisations and degrees are as follows:

## **University of Jyväskylä (JyU):**

- Area of expertise: health gerontology and epidemiology
- Degree awarded: Master of Health Sciences

## **University of Iceland (UI):**

- Area of expertise: gerontological social work and social gerontology
- Degree awarded: Master in Gerontology

## **Lund University (LU):**

- Area of expertise: environmental and health gerontology
- Degree awarded: Master of Medical Sciences, major in midwifery, nursing, physiotherapy or occupational therapy with a specialty in gerontology.

NordMaG may be described as three programmes in gerontology with a common core of joint courses (a compulsory introductory course of 5 ECTS and a selection of up to five intensive 10 ECTS courses, of which a minimum of one is compulsory and a maximum of three may be chosen) and a variety of advanced courses in gerontology available in the Nord-

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<sup>1</sup> Programme description, University of Jyväskylä website

MaG universities. Each student has an individual study plan but is required to complete at least 30 ECTS at a consortium university other than his/her own. The thesis, which corresponds to a minimum of 30 ECTS, must be within the field of gerontology. According to the Consortium Agreement students can choose to complete their thesis at a consortium university other than their own.

Also students are required to complete at least 30 ECTS at a consortium university other than their own. The thesis, which corresponds to a minimum of 30 ECTS, must be within the field of gerontology. According to the Consortium Agreement students can choose to complete their thesis at a consortium university other than their own.

The whole programme covers 120 ECTS and is planned for two years' full-time studies except LU, where it extends over four years half-time. However, arrangements can be made for LU students to complete the programme in two years and UI students may extend their studies over a longer period than two years.

Entrance requirements vary between the different partners:

At JyU the programme is integrated in the international master's programme in Gerontology and open for applicants with a Bachelor's degree in relevant fields, a proven interest in the field of gerontology and a good command of English.

At UI it is integrated in the master's programme in Gerontology and open for applicants with a BA or BSc in social or health care disciplines.

At LU, finally, the programme is integrated into the Master of Medical Sciences programme and open for applicants with a BSc in nursing, midwifery, physiotherapy or occupational therapy.

The programme is advertised on the Internet, in brochures and presented at relevant conferences etc. It is easily found on the JyU website, less visible on the LU website The UI website is now being developed, and more information in English is now clearly available. Jyväskylä has produced a commendable study guide for NordMaG and the Jyväskylä based programme (The Master's Degree Programme in Gerontology). No similar documents exist at Lund and Reykjavik.

The plan for the first cohort was to admit a total of 15 students, 5 at each university. However, although the programme initially attracted a larger number of applicants, the final figure was 13, of whom 3 at Jyväskylä University, 4 at Lund University and 6 at the University of Iceland. At the time of the deadline for the 2009 – 2011 cohort, a total of ?? students had applied.

The Agreement between the three universities specifies that the language of instruction in the joint courses is English. For the rest, the language of instruction varies according to the decisions of each participating university. In practice this means that English is the medium at Jyväskylä, whereas Swedish is the main medium at Lund University and

Icelandic at the University of Iceland. The language of the Master's thesis may also vary according to the rules of the home university of the student.



# Aims of the programme

The central document regulating the NordMaG programme is the Consortium Agreement between the JyU, LU and UI, signed by the Vice-Chancellors of the three universities. The Agreement describes the aims of the programme as follows:

*“NordMaG is a multidisciplinary Master’s programme (120 ECTS) in gerontology offered jointly by the Consortium universities. The programme has a special emphasis on issues relevant to ageing societies and it combines the gerontology expertise traditions of Finland, Sweden and Iceland. The curriculum of NordMaG is distinctly interdisciplinary having foundations in health sciences, social sciences and behavioural sciences.”*

These aims are thus jointly agreed by the leaderships of the three universities. They are also highly relevant and beneficial to students taking part in the programme. The three universities have different kinds of expertise in the area of gerontology and apply that expertise in the three different programmes. NordMaG students have access to these three specialities in the joint courses and the Agreement further gives students the option to follow courses and to receive supervision for their theses at the partner universities. This caters for multidisciplinary, but the extent to which this is actually done remains to be seen.

The relevant faculty boards of the three universities support the general aims of NordMaG.

Each partner university has its own aims in the area of gerontology and they may be described as follows:

JyU has an international English-speaking programme, which brings together the areas of gerontology and public health, health promotion and health education, occupational therapy, physiotherapy and sports medicine. This is a broad and unique combination in Finland and probably in the Nordic countries. The aim is to “advance knowledge and methods for assessing health, functional capacity and associated factors in different age and population groups, and to develop new measures for promoting health and well-being by means of prevention, therapy and rehabilitation.”

The LU programme, Master of Medical Science (Two Years) with a Major in Midwifery/Nursing/Occupational Therapy/Physiotherapy (*Masterprogram i medicinsk vetenskap med huvudområde arbetsterapi/omvårdnad/sjukgymnastik*), is more clearly oriented towards

health science and the aim is to promote interprofessional, national and international advanced level learning.

The UI programme, finally, has a social science orientation aimed at educating students with a background in social science or health care who will take up positions in management and policy making with regard to elderly people. It is combined with a local Master's Programme in Gerontology.

Students are enrolled in the main programme of their university and are awarded their degrees from that university. Thus, NordMaG can hardly be described as one unified programme, with clearly expressed aims in terms of learning outcomes. It is rather three different programmes with a common core.

## **Conclusions**

The general aims of all three local programmes, are clearly presented and conform to current requirements. The aims of each of them are expressed in terms of learning outcomes. However, NordMaG does not appear to be a formalised programme with its own programme syllabus and established student learning outcomes in accordance with the European Higher Education Qualifications Framework. A clear description is given in the Agreement, which, however, is not a proper syllabus. As far as the panel of assessors has been able to ascertain, neither the Introductory course nor the first Intensive course has defined aims in these terms. The second Intensive course, however, is also part of the Icelandic Gerontology programme and is established in accordance with the principles of UI. The aims of Nordic cooperation and mobility are fundamental to the programme and are clearly defined in the Agreement.

## **Recommendations and points for development**

- If NordMaG wishes to be seen as one unified programme with its own overall aims it will have to establish a joint programme curriculum with its own clearly expressed aims in terms of student learning outcomes.

# Jointness

The formal Agreement between the participating institutions is signed by Vice-Chancellors of the respective universities and specifies the conditions of the programme. There are, however, limitations to the joint provision, which will be discussed in the following. The partners (and a few other institutions) cooperated several years before the development of NordMaG and the idea of establishing a joint effort, which takes into account different aspects of the area of gerontology developed as a natural consequence and is very sound. It is prioritised by all three universities and supported by the faculties (as evidenced by interviews with faculty leaders). There is a funding strategy, also specified in the Agreement. There have been a number of (more than five) meetings of the programme board, often combined with conferences or other activities so as to minimise costs.

There is little doubt that NordMag involves benefits and added value for the three institutions as well as for the students. In our view the steering group/programme board with its rotating chairmanship seems to be working. The partners have close collaboration through mail contacts between regular meetings. The first joint intensive course was developed by teachers from all three universities. The students have, at least theoretically, a wide choice of courses at all institutions, but in practice, the choice is limited by the language policy (see further down), and by the fact that they are enrolled at their home university (more of this further down) and are awarded their degrees there. The NordMaG specialisation is described in the Diploma Supplement and students will also receive a certificate signed by all three universities.

The relevant faculties of all three universities have allegedly approved the joint courses that have taken place so far, i.e. the introductory web based course (5 ECTS) and the 10 ECTS intensive course *Spectrum of Functioning in the Ageing process*. We have not, however, seen the formally approved syllabuses of the joint courses at all the universities. Individual faculties contribute funding to the development of joint courses (e.g. LU 165 000 SEK).

The Agreement states that that the Consortium will “endeavour to secure funding for the NMPB (Nordic Master Programme Board) activities and other coordination costs for 2009 – 2012” and also that the “parties commit themselves to organizing and implementing the joint NordMaG programme for a period of four academic years starting from the academic year 2008-2009”. Since the programme is now being advertised again for 2009 – 2011, there is confidence that financing is sufficiently

assured. Costs for student travel and subsistence for the study abroad periods included in the programme will have to be borne by the students themselves (unless Nordplus grants or other grants can be obtained).

In several ways the question of jointness is slightly problematic when it comes to NordMaG. There are no joint processes for application and enrolment. Information about which students and how many are admitted at each of the programmes does not seem to be shared immediately and automatically. The Introductory course is an Internet based course, and the students do not meet for the first time until about five months later for a first joint intensive course. However, the introduction course was based on lectures, which were recorded and available on the Optima portal at Jyväskylä university, to which all students have access. There was student interaction through pairing students from the different countries and having them work together on the portal. Information-sharing and discussions were also encouraged through a discussion area on the web, in which students could exchange ideas.

The first joint Intensive course brought students together for the first time for one week in Jyväskylä. There were carefully planned activities, which started before Swedish and Icelandic students arrived in Jyväskylä. Again, many joint tasks were set, and students from the different countries were paired up. There were joint discussions in the group as a whole and also on the website. During the course, students were also made to develop further their ideas for their Master's theses. Students affirm that the intensive course was interesting and gave perspectives from the other universities. "It made us all become a group and communicating on the web became much easier after this". Working together on projects with students from another country was also seen as positive, though not by all.

A certain amount of criticism could also be heard from students: "There was not enough discussion and there were web based lectures also in the first Intensive course (one of which was the same as a lecture in the introductory course). We could have listened to them before the intensive week . . . Working in pairs was not always ideal (depending on who you were paired up with. Groups of three might have been better."

The real extent of students' mobility is relatively limited. The Agreement specifies that students are required to complete at least one semester at another Consortium university. But the joint intensive courses are credited as studies abroad and three such courses are equivalent to one semester (30 ECTS). Since the time spent abroad during these courses is one week each and also one of them may be spent at the home university, students may very well complete the programme with a total of two weeks at the other institutions. It is true that there is a great deal of information-sharing, communication and collaboration before and after the intensive weeks, but that hardly makes up for the experience of spending

a term at a university in another country. One very valid reason for the present arrangement is that many of the participants in all three countries are mature students with jobs and families, who are unable to stay away for extended periods of time. It works well for them, but the student who wants to avail himself or herself of the possibility as expressed in the agreement, will need to make special efforts and accept special conditions. It is also, of course, a question of funding.

One of the aims of the Nordic master's project was also to enhance the attractiveness of Nordic higher education for non-Nordic students. The Agreement between the three universities includes a language policy. It specifies that the language of instruction is up to each partner university. This means that effectively, with the exception of the joint NordMaG courses and the local programme at JyU to which NordMaG is attached, courses are mostly taught in the vernacular. This arrangement excludes most non-Nordic students, even if provisions can be made for reading courses and thesis supervision in English. It also makes it difficult for Nordic students who wish to take courses at the partner universities' Gerontology programmes as part of NordMaG.

A certain amount of teacher exchange takes place in the joint courses and a few teachers have been present at the meetings of the steering group, but otherwise it seems to be limited to the members of the steering group, and other teachers possibly being engaged in the development of the web based joint courses.

## **Conclusions**

The jointness of the collaboration is secured in the Agreement, in the activities of the programme board and, as far as the students are concerned, in the joint intensive courses including the collaboration that takes place before and after the intensive week via the Internet. The nature of the programme will also be clarified in the Diploma Supplement and the degree certificate signed by the three partner universities. Cooperation in the steering group functions reasonably well. However, as has been stated above, NordMaG can hardly be described as a unified, joint programme, but rather as three programmes with certain joint courses. Physical mobility is limited even if there are clear efforts to support cooperation between students from the three countries. For non-Nordic students and even for students in the three countries involved, the language policy makes mobility difficult, even if it is possible to pursue reading courses and receive supervision in English at both LU and UI.

## **Recommendations and points for development**

- Even if it is not feasible to organise a joint application and admissions policy, information on the admission situation should be continuously and automatically shared among the partners.
- If the programme wants to attract more non-Nordic students taking courses at LU and UI, more provision must be made available in English.
- If the NordMaG wants to develop a more integrated programme, more joint activities could, for example, be made compulsory than one 5 ECTS Introductory course and a one-week joint intensive course. Also, it is advisable to encourage mobility actively to spend more time in one (or both) of the other countries than the three (or two) intensive weeks. It is especially important to develop strategies for facilitating mobility for mature students, and funding should be found for this purpose.

# Programme contents, teaching and link between teaching and research

The three programmes that make up the collaboration represent three different aspects of gerontology, and this is, in itself a sign of interdisciplinarity.

The joint provision in the first Intensive course contained a series of lectures given mainly by scholars and teachers from Finland (JyU) but with two scholars from LU and a guest lecturer from Copenhagen University. There were also lectures available electronically. Furthermore, students were required to complete learner diaries, to read in depth a scientific article, write a summary and present it in class. One seminar was also devoted to a discussion on the further development of the master's thesis. The workload involved exceeded the one week spent at Jyväskylä although it is difficult to tell whether the time devoted to preparations and examination tasks corresponds to the 10 ECTS credits.

The students interviewed stated that one week in JyU deepened their knowledge of Gerontology and that it was important to get in touch with and work with students from other countries and with other backgrounds both scientifically and socially.

Part of the effectiveness of the teaching is the relationship between teacher-student contacts and the portal (Optima). Both the feedback from students and our discussions lead to the conclusion that this works well. This is not least due to the openness and approachability of teachers.

**At JyU** NordMaG is part of the Master's degree programme in Gerontology taught entirely in English. Structured individual study plans are used and seem to be useful. Discussions with teachers and students verified that it is research based in several meanings of the word. We also got the impression that teachers are committed to both teaching and research and that teaching in English does not present a problem. Teaching methods are modern and versatile.

Teachers are involved in current research activities, also internationally, and master's students are integrated in the research environment in the fields of epidemiology, health studies and gerontology from the beginning of their studies. Multidisciplinarity is emphasised, and the use of existing research data bases is almost compulsory in the preparation of master's theses, which account for 30 ECTS credits.

The structure of the programme as a whole is not immediately transparent for the incoming student. However, those responsible for the programme support students by helping them to select appropriate courses in the appropriate order for NordMaG. Also the individual study plan and

the Study Guide help to clarify the possible avenues and progression of the programme. The students were satisfied with how this was working.

At LU students follow a Master of Medical Science programme in the field of either Occupational Therapy, Nursing, Physiotherapy or Midwifery. Students are awarded the degree of MSc in one of these areas with a specialty in Gerontology. The programme is still under development and courses are in the process of being established. This is particularly true of the Gerontology specialisation. Courses, with the exception of the Gerontology specialty, courses are mainly given in Swedish.

The programme is open and very flexible, and students are permitted to take courses not only at Lund, but also at other universities that provide education in the same field(s). Another option is taking reading courses with an exam at the end. Also, since students are mature students who have a job simultaneously and also have a family, their study activities may vary from semester to semester. This makes study counselling important, and systematic recourse to a written individual study plan could then play a significant role for the planning and follow-up of individual students.

Teaching includes research-like methods like problem-based learning and inquiry-based learning, which prepares for further studies at PhD level. Teachers are active researchers, nationally and internationally, and students may be (and are) involved in research activities. The extent to which this happens probably varies with the courses the students choose. The thesis is, of course, a research project, and since students are encouraged from the very beginning to plan their theses and receive feedback, they are automatically introduced to research methodology. Those who had developed ideas already in the Introductory course received feedback in the first Intensive course, and could thus get a head start.

Both students and the programme leadership affirm that they want to include clinical application as part of the programme.

At UI NordMaG students follow a study programme which involves 35 – 45 ECTS mandatory courses. These include the Introductory course and the NordMaG course being developed by UI for August 2009. Students may also choose to take another two NordMaG courses to meet the study abroad requirement and all have, in fact, already participated in the Intensive course at Jyväskylä. A 10 ECTS course on research methods is also compulsory. Further, they may select courses at the Faculty amounting to 30 – 50 ECTS as electives. The thesis may count for 40 – 60 ECTS, which is (considerably) more than is required at the partner universities.

The individual study plans have been delayed, but are now being introduced.

Links with research are somewhat limited, and there are comparatively few teachers with a PhD in the field, although there is at least one thesis in progress in cooperation with other universities in Scandinavia.



It is also difficult to tell whether there is a research intensive environment in the area of Gerontology at UI. There is, however, one large database used in nursing homes, which many master's students will be able to use for their thesis work, and one which students have access to already.

## **Conclusions**

Teaching and learning methods throughout the NordMaG programme are research-oriented. Basically, the field of gerontology is multidisciplinary, and this is reflected in the programme through the different specialities at the three universities. Students are mainly content with the level of teaching. The contents are relevant and support current needs both in the Nordic countries and internationally.

The environments with the possible exception of UI are research intensive in the field of gerontology and teachers are mostly active researchers both nationally and internationally. Students are also often involved in research activities. Teaching and learning methods are up-to-date. It is, however, doubtful whether all the sites so far meet the criterion of teachers' formal qualifications in gerontology and related fields (50 % senior researchers and 25 % professors).

The different requirements regarding the extent of the thesis may have an impact on the mobility of students within the programme.

## **Recommendations and points for development**

- The individual study plan should be developed at all three sites as soon as possible in order to make it possible both to monitor student progress systematically and to provide students with planning instruments for studies which may extend over a fairly long period of time.
- The different requirements with regard to the thesis between Iceland, on the one hand, and Lund and Jyväskylä on the other hand will need to be considered in relationship to mobility within the programme.
- Since the programme involves three different countries it might be interesting to introduce comparative studies both as joint courses and as thesis topics. This is also provided for in the Agreement.

# Relevance for professional careers

The question of labour market demand and employability is to some extent dependent on the individual site. Several NordMaG students are eager to continue as researchers, and there seem to be openings in this field as well as in teaching. As regards health administration this is a responsibility at the level of either state or regional authorities, and their readiness to employ staff with second cycle degrees varies.

With the exception of UI, there seem to be few contacts between universities and stakeholders (future employers) with regard to NordMaG.

## Labour market demand and employability

### JyU

The GerPro programme, which is “twinned” with NordMaG, includes a short course towards the end which provides information on how to write CVs, make effective presentations etc.

The Faculty has a strategic plan for employer contacts, but there seem to be no regularly recurring meetings or developments in this field.

No labour market surveys have been made with regard to the job market for graduates of NordMaG. However, teachers and students were convinced that there is a clear demand for persons with an international master’s degree in gerontology. They foresaw that one-third would continue doing research, one-third would go into teaching and one-third into health administration. They also maintained that those who gave up their jobs to take up master’s studies would get better jobs after graduation.

### LU

Some of the students want to get involved in research and have been encouraged to go on to PhD studies. Others see a career in the municipalities, which need the kind of competence provided by the programme although they are not fully aware of this. They seem to think one year at advanced level is sufficient. (Lund also provides the option of offering a one-year master’s degree.) It was also maintained that clinical experience within the scope of the programme would be an extra asset for labour market adaptation in the public sector.

There are no regular systematic contacts with possible employers in the area of gerontology. At the bachelor’s level students have a period of practical work, but this is difficult to fit into the master’s programme.

## **UI**

At the Bachelor's level students have a period of practical work in social services for the aged or in geriatric hospitals where they become familiar with how social gerontology is put to practice, and become acquainted with possible future employers. This is difficult to fit into the research-oriented studies at Master's level.

Students want to continue with research, proceeding to doctoral studies. This would certainly add to the research environment at UI but may need strengthening the present staff in order to provide sufficient supervision.

## **Conclusions**

Contacts with the labour market outside the academic world should be further developed with regard to the programme as a whole. There seem to be openings particularly in the area of health administration, but also in teaching and research.

## **Recommendations and points for development**

- It is recommended that regular, systematic contacts with the labour market outside the academic world should be improved with regard to the programme as a whole. Inclusion of clinical experience (if there is room for it) might be an extra asset.
- A course like the one at Jyväskylä on writing CVs, effective presentations etc., may well be developed into a joint NordMaG activity.
- It will be important to follow up alumni of NordMaG systematically.

# Depth and Progression

It is difficult to assess the progression of the NordMaG programme itself, since it is so deeply embedded in the three university programmes. Progression in the NordMaG programme is found in the local programmes and the way in which NordMaG courses fit into these programmes varies. In this context the individual study plans are extremely important for the progression of the individual NordMaG student.

Progression is found in the way in which the thesis is developed. Students are encouraged to present their ideas already in the Introductory course, and the first Intensive course includes slots where they are expected to show how these thoughts have been developed. As has been stated above, the Intensive course was taught mainly by teachers from Jyväskylä. Two teachers from Lund were present, of whom one supported thesis work, but none from Iceland due to unforeseen circumstances. It was planned to have representation from all three partners in order to assist students from all institutions in the development of their theses within the fields of all universities.

The NordMaG students come from different backgrounds, and the three partners have different orientations, which is a strength. It is difficult to assess the extent to which students' prior knowledge is taken into account. At JyU it may rather be a question of the development of students' academic abilities, as they may be admitted on the basis of very different first degrees. We have no reason to doubt, however, that teaching in any of the three programmes is based on an academic level corresponding to a second level degree.

Learning outcomes are defined in accordance with reference to knowledge, abilities and generic skills in each of the three local programmes and are being introduced in each of the joint courses, but not for the NordMaG programme as a whole.

The NordMaG programme meets the criterion of containing a main area of studies (gerontology) amounting to a minimum of 60 ECTS (including the thesis) and a minimum extent of the thesis of 30 ECTS.

## **Further comments on the individual sites**

### **JyU**

The JyU students and teachers were satisfied that their programme had a natural progression. This may be because the Study Guide provides a clear picture of the programme as a whole. The progression may, ironi-

cally, have a slightly negative impact on mobility, since, as students expressed it, spending time abroad may prevent you from meeting course requirements within the programme at home.

## **LU**

Students following the LU Master's programme in Medical Sciences have the possibility to obtain an intermediate degree (one-year master). However, this does not apply to the NordMaG programme, as these students will all take a two-year degree. A thesis is required both for the one-year degree (15 ECTS) and for the two-year degree (30 ECTS).

The programme provides for great flexibility in terms of pace of study. It may vary from full time in one semester to quarter time in the next in order to make it possible for students to pursue their jobs. In our view, this makes the use of an individual study plan even more valuable, provided it allows for both flexibility and progression. Such a plan does not exist on paper today. At present, it is probably mostly the development of the thesis which defines progression, although it is found also in Biostatistics and Qualitative methods, which are both given as courses I and II.

But the students and teachers affirm that courses are on a high level overall. Students clearly find themselves in a research environment and are involved in research projects related to gerontology. However, there are at the present moment only three courses in gerontology, two of which are introductory. The three NordMaG courses are thus necessary for Lund students to meet the requirements of the Agreement.

## **UI**

According to the teachers and students, the courses are all at Master's level but can be taken in any order. The progression can be regulated through the use of the individual study plan, but this has not yet happened. Learning outcomes are defined in the syllabuses and cover the required outcomes of the local master's programmes. As mentioned above, the thesis requires 40 – 60 ECTS, which is more than is demanded at the two other sites.

## **Conclusions**

The extent of depth and progression varies between the three partners but they are all at the level of Master.

Individual study plans are not developed at all the three sites.

The use of learning outcomes is not consistent throughout the programme.

## **Recommendations and points for development**

- The members of the consortium might wish to study each other's course structures in detail to identify the way in which they build up the depth and progression of their curricula and, in this way work out how the NordMaG programme may be developed into a more unified structure.
- We strongly recommend that the consortium develops the use of the individual study plans for all its NordMaG students and consider the possibility of using the same structure for this document.

# Quality Assurance

The Agreement specifies that the “NordMaG programme board (NMPB) will be responsible for coordinating quality assurance activities within the NordMaG programme. Quality assurance will be based both on the ongoing national and university-level practices and policies and on specific NordMaG quality assurance activities that will be agreed upon by the Consortium. Upon the expiry of this Agreement an external evaluation will be carried out in a manner to be specified by NMPB.”

Joint NordMaG courses are evaluated through web questionnaires. A questionnaire was posted on Optima soon after the course and completed by the students. Students felt that the feedback they were given was provided rather late. A student evaluation of the first Intensive course has not yet taken place (according to students). This is understandable, since the course consists of much more than the Intensive week, but it might have been useful to get reactions on the Intensive week separately.

A system of joint quality assurance for other activities, such as the continuous monitoring of students, teacher exchange etc. does not exist yet.

For the rest, each partner is responsible for the quality assurance of its provision. This may be reasonable when it comes to study environment, infrastructure etc and these aspects seem to be in order. However, we are not certain whether this information is shared within the consortium. It also seems to us there is so far any common knowledge in the programme of the development, the progress and the status of NordMaG students as individuals or as a group.

## Conclusions

Evaluation of individual (joint NordMag) courses takes place, but it seems that it could be administered to students earlier. The results of these course evaluations seem to be fed back to students, but comparatively late. At the moment, there is no joint quality assurance programme as required by the Agreement.

Since many (most?) students work at least part-time, it is essential to have a system of monitoring them and guiding them through the NordMaG programme

## Recommendations

Develop a joint quality assurance programme. This may include e.g. shared information on students from application to admission, joint pro-

cedures for monitoring students' progression through the programme through the use of the individual study plan, a plan for teacher exchange within the programme. It should also, in the future, include evaluation of the programme as a whole (as required in the Agreement) and follow-up of alumni and with employers.



# Final Conclusions and Recommendations

The NordMaG programme may be described as three programmes with a common core of joint courses. Each of these programmes is well established within its own environment and NordMaG cooperation works smoothly through the Programme Board, which meets on a fairly regular basis to discuss and agree on matters of joint importance. It is, however, important to see to it that all the sites have the same understanding of what constitutes the board. The university administrations and faculties support the programme, and in some cases provide extra funding. The continuation of the programme is guaranteed until 2012 in the Agreement.

The definition of a joint programme, like that of a joint degree, is not clear-cut, but in comparison with e.g. most Erasmus Mundus programmes NordMaG has less of a common structure. There is an excellent Consortium Agreement, which specifies the aim and focus, the management, the terms for implementing the programme, the commitment and tasks of the Consortium members and quality assurance procedures. It also sets down requirements for the specific NordMaG courses (one introductory course and one advanced intensive 10 ECTS courses. But there is no programme syllabus with specified learning outcomes etc. Admittedly, this may be difficult to achieve, since NordMaG is so firmly based in each of the three institutions.

Many of the students in the programme study part time. This is most clearly the case at LU, where the programme is offered on a half time basis. But all three universities provide for flexibility. Many students work half (or even more) time, and have family responsibilities. Thus the mobility requirement (30 ECTS or one semester abroad) is difficult to meet. The solution is option to choose two intensive courses abroad (each lasting for one week) plus one intensive course studied at the home university. Even if the course work demanded in the intensive courses is carried out in collaboration between students from the different partner universities and corresponds to far more than the time spent abroad, this arrangement appears to fall short of the demand for a total of one semester spent in other countries.

The language policy of the programme makes it difficult for non-Nordic students to follow the programme at Lund and Iceland, unless they know the language of the countries. It also creates problems for the Nordic participants, especially Finnish and Swedish students wanting to pursue studies in Iceland, and Finnish and Icelandic students wanting to

pursue studies in Sweden. They could write their theses in English under supervision, and take a reading course, but their choice is fairly limited.

There is, for obvious reasons, no joint admissions process, but students apply to the university of their choice. There does not appear to be a formal process of sharing information about admissions or student progress.

It is the view of the panel that the programme contents at the three sites are up-to-date and research based. There is a link between teaching and research as a result of the fact that teachers are also active researchers. Students are strongly encouraged to begin planning their thesis at an early stage.

Students have a clear idea about the profession they want to pursue after their degree. It seems that there is a fairly open labour market within research, teaching or health administration. However, not all the partners in the programme have regular systematic contacts with possible employers and no employer surveys have been made.

The depth and progression of each of the three programmes meet the criteria, though the structures (since they represent different aspects of Gerontology) differ. This makes the development of common individual study plans even more important. The programmes are definitely all at Master's level.

Individual courses are followed up and evaluated at the three sites as are also the joint courses. However, so far there are no joint quality assurance measures with the exception of the course evaluations of the joint courses.

## **Recommendations**

- Establish a formal programme syllabus.
- Make arrangements for increasing mobility of Nordic students. Such arrangements should include a revision of the language policy.
- Make arrangements to facilitate for non-Nordic students to follow the programme. Such arrangements should include a revision of the language policy.
- Introduce a formal process of sharing information between programme partners about admissions and student progress. This could be facilitated by the introduction of a programme specific individual study plan and a common register of students in the programme. As the programmes differ in the development of depth and progression, the individual study plan is important also in this respect.
- Introduce a study guide at LU and UI on the model of that developed at JyU.

- Improve contacts with the labour market outside the academic world.
- Develop a joint course on labour market contacts (job-seeking, CVs, presentations etc.).
- Develop a joint quality assurance and enhancement programme.
- Alumni surveys will be an important part of the development of the quality assurance system once students have graduated.
- Develop further the work of the joint programme board and the administration of the programme as a whole.

# The Nordic Master's Degree Programme in Plant Pathology – NorPath

The Nordic Master's Degree Programme in Plant Pathology – NorPath, is the result of a partnership between four Nordic universities; University of Copenhagen, Faculty of Life Sciences (KU-LIFE), the Norwegian University of Life Sciences (UMB), Swedish University of Agricultural Sciences (SLU) and University of Helsinki, Faculty of Agriculture and Forestry (HU-AF). LBHI Agricultural University of Iceland has also been associated to the programme but the role of the university is not quite settled.

From 2008 students have been enrolled at the program at KU-LIFE and UMB and the plan is that from 2009 students can also be enrolled at SLU and HU-AF. 7-9<sup>2</sup> students joined the programme in 2008 and the hope is that about 25 students will sign up for the programme in 2009. The purpose of this report is to evaluate the programme as it has been running at KU-LIFE and UMB for about six months.

The universities involved in the programme offer different specialisations reflecting the research and teaching at the departments involved in the programme. Students are admitted and enrolled at a home university which awards the degree.

## **KU- LIFE:**

- Areas of expertise: Molecular plant pathology
- At KU-LIFE the NorPath programme has been structured as a specialisation under the existing MSc programme, 'Plants and Environment'. Graduates are awarded the degree 'MSc in Agriculture'

## **UMB:**

- Areas of expertise: Ecology and epidemiology of plant diseases
- At UMB the NorPath programme has been structured as a specialisation under the existing MSc programme 'Plant Science'. Graduates are awarded the degree 'MSc in Plant Science'.

## **SLU:**

- Areas of expertise: Ecology and epidemiology of plant diseases

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<sup>2</sup> 5 students are enrolled at the programme at KU-LIFE. At UMB the exact amount of NorPath students is uncertain because the students choose their line of specialization at a quite late point in their studies. Currently 4 students are writing their master thesis within the field of plant pathology, but they are not enrolled as NorPath students. Based on the knowledge about the master thesis expected in 2010, 2-4 students are going to be NorPath students.

- Degree awarded: 'MSc in Plant Biology', with the specialisation Plant Pathology.

**HU-AF:**

- Areas of expertise: Molecular plant pathology
- Degree awarded: 'MSc in Plant Production Science'.

The NorPath Programme is a two-year programme equivalent to 120 ECTS. Mandatory courses, core courses and the final research-based thesis in plant pathology constitute the common core of the programme and are equivalent to minimum 90 ECTS. The partner universities have developed a joint introductory summer course, 'Plant Pathology in a changing world' and a joint course in 'Molecular Plant Pathology'. Only the summer course is mandatory.

The admission procedures have not been harmonised or coordinated among the partner universities. However, in general it is expected that students who want to be enrolled at the programme should hold a BSc degree (180 ECTS) in a relevant area, e.g. Natural Science, Natural Resources, Agriculture, Plant Sciences or Biology. The purpose of the programme is to provide the students with a thorough understanding of the principles and techniques of the science of plant pathology. It is expected that graduates will have obtained specific knowledge about plant pathology as well as generic skills. Hence, they will be able to work with research, education, land maintenance, as farmers' advisors etc.

# Aims of the programme

The aims of the programme are defined in the self-evaluation as well as in the 'Final Report in Development Project regarding Nordic Master Programmes'. It is stated that "the main objective of the programme is to provide the graduates with a thorough understanding of the principles and techniques of the sciences of plant pathology". The students are expected to gain knowledge and practical skills within areas such as plant health, sustainable disease management, epidemiology, infection biology, functional genomics etc. The aims of the programme are described in terms of learning outcomes and are in line with the European qualifications framework. It means that the learning outcomes are formulated in a way that accentuates the expected knowledge, skills and competences of the graduates. The learning outcomes cover knowledge of the main study area as well as generic skills. The learning outcomes are specified for the joint summer courses, 'Plant Pathology in a Changing World' but not for the joint course in 'Molecular Plant Pathology'.

At the site visit the aims of the programme were further described. An overall aim at KU-LIFE and UMB is to educate more candidates with specialized knowledge about Nordic plant pathology. The intention is to strengthen the field by linking the capacity in the Nordic countries and create synergy between the specialized knowledge of the scientific staff. The NorPath programme gives the students the possibility to pursue their specific interests, attend joint courses and furthermore provides an opportunity to develop a network with students and researchers.

Another central theme, related to the aims of the programme, concerns the status and structure of the programme. At the site-visit it was a central point for the representatives at both KU-LIFE and UMB that the NorPath programme should be developed from being a mobility programme into a double degree programme where the home university as well as the second university issue a final diploma. In the self-evaluation it is stated that the long-term goal is to establish a joint degree.

## Conclusions

The aims of the NorPath programme are clearly stated in the 'Final Report in Development Project regarding Nordic Master Programmes'. The aims are formulated in terms of learning outcomes and are in line with the European qualifications framework. However, the learning outcomes of the joint courses are not specified in these terms.

The representatives from KU-LIFE and UMB have a common understanding of the aims of the programme. At both universities they commented on the status of the programme, and suggested that it should be changed into a double degree programme with a long term strategy of building a joint degree.

## **Recommendations and points for development**

- It is recommended that the learning outcomes of the joint courses should also be formulated in terms of learning outcomes.
- It is recommended that the future status of the program should be discussed among the partner universities. Future perspectives and potential challenges for the programme should be considered. The partner universities should particularly address the problem of different semester structures as it seems to narrow the possibilities of the students to pursue their interests. Furthermore, it should be noted that in the Erasmus Mundus master programmes a double degree is a minimum requirement for qualifying for programme funding.

# Jointness

The jointness of the NorPath programme has been evaluated with reference to several criteria. Hence, in this chapter of the report the assessment is structured in four overall themes related to jointness;

## **Agreements and cooperation between the participating institutions**

The participating institutions have not signed a formal agreement directly regulating the NorPath programme. However, at the site-visit it was mentioned that they have signed a general contract for corporation as members of the NOVA University Network.

In the self-evaluation it is explained that the NOVA University Network has been supportive in the development of the NorPath program. Through NOVA the institutions have cooperated on different projects, for example PhD programmes. In all, it seems like the NOVA Network has played a central role as a platform for the cooperation between the institutions involved in the NorPath programme. Furthermore, NOVA has given economic support hosts the NorPath webpage.

The participating institutions have cooperated through the development of two joint courses; an intensive summer course, 'Plant Pathology in a changing world' and on a course in 'molecular plant pathology'. The NorPath programme and the joint courses are fully recognized by the institutions involved in the programme. So far the teachers of the programme have met through planning meetings and two joint workshops. Additionally, it is expected that the partnership will be further developed when the master thesis of the students at the programme are going to be supervised by teachers from two or more partner universities.

The administrative staff at the universities assist the teachers and the management with administrative and practical tasks. However, at the site-visit the representatives from KU-LIFE and UMB described the planning and coordination of the programme as quite a burdensome task. In particular, work on the common elements of the programme, for instance developing joint courses, seems to require extra resources. The representatives of KU-LIFE and UMB state that they would welcome a funded coordinator of the NorPath programme who could be responsible for coordination and practical tasks.

In general the funding of the programme is a potential challenge. So far the programme has been financed with the help of the Nordic Council of Ministers, NOVA and Nordplus, who have all covered costs related to



the development of the programme, joint activities and travel costs for students. In a future perspective, extra funding will probably be needed on a more permanent basis for joint activities. However, the partner institutions have not yet developed a common funding strategy.

The managements of the institutions at faculty level support the goals and objectives of the programmes. The project group was informed at the interviews that the faculty management will evaluate and follow the development of the programme closely.

## **Added value**

In the self-evaluation it is listed how the NorPath programme is expected to provide added value when it comes to expert synergy, optimized used of resources, attracting academically outstanding students etc. In addition, it is maintained that the strengths of the different partner institutions have been indentified at a common meeting to create awareness of the specific areas of expertise. The intention is that the skills and knowledge of the academic staff should be exploited in a complementary way.

The teachers at KU-LIFE and UMB declared that meeting through the NorPath programme has been an experience that has enhanced the dialogue between the scientific staff at the partner institutions and made them more aware of the specific areas of expertise at the other institutions. One teacher mentioned that the improved dialogue had led to considerations about teamwork on a future research project. Hence, the dialogue seems to bring added value to the relationship between the institutions involved in the programme.

## **Mobility**

In the assessment of mobility within the programme it is important to note that the students are recommended to visit another university, but it is not obligatory. Hence, students in this programme are not secured a stay at an institution abroad. The project group has the impression that the students joining the programme are interested in mobility, and all the students we met had planned to study abroad. However, the different semester structures at the participating institutions seem to produce problems. At the site visit the management, the teachers and the students all mentioned that the different semester structures are a serious constraint to the programme and its future perspectives. For instance they tend to be a barrier when developing joint courses as well as limit the students' possibilities to follow their interests. Developing short course as well as e-

learning may be part of a future strategy but should not replace the students' experience of a long term stay abroad.

## **Rights and opportunities of the NorPath student**

In the self-evaluation it is stated that potential students might find the NorPath programme more appealing if it is transformed into a double degree programme. Speaking with some of the students at the site-visit made it clear that the motivations of the students to join the programme are more complex. While some emphasized that the programme enables them to follow their main interests, others have joined the programme because of mobility and the international aspects. Discussing the issue of whether the programme should be transformed into a double degree programme some students supported the idea while others argued that it might limit the possibilities when creating your own individual study plan.

The infrastructure, e.g. library and laboratories, seems to meet the needs of the programme. At both KU-LIFE and UMB quite a lot of international students are enrolled, and there seems to be a structure of proper arrangements and procedures for receiving foreign students. At KU-LIFE there is a language policy that states that master programmes should be taught in English. At UMB a two language policy has been developed which means that Norwegian is the main language and English is the second language. 8-9 master courses are taught in English. Teaching in English does not seem to be a problem. However, the teachers at both institutions have the opportunity to attend extra language training if they feel it is needed.

At the site-visit the students said that in general the infrastructure and different procedures work satisfactorily. However, some of the students mentioned that when they attended a short course at HU-AF they experienced problems getting a computer log-in and they thought that the information about the course was given too late. It is suggested that the formal information about the NorPath programme should be provided through a NorPath database or some sort of Electronic-forum. An electronic-forum might also be useful when coordinating the NorPath activities and provide a common platform for the students and teachers involved in the programme

In the self-evaluation it is noted that a website with information about NorPath is considered to be the most important way of promoting the programme. The NorPath website has been developed and is now hosted by NOVA. The basic information has been introduced on the webpage but more detailed information should be added. The NorPath webpage can be accessed through the WebPages of KU-LIFE and UMB. At the

site visit it was mentioned that it is a challenge to draw attention to the programme and it was stated that the visibility of NorPath should be improved. Hence, it should also be possible to access the NorPath page via the respective pages for biology studies.

## **Conclusions**

A formal agreement between the participating institutions for the NorPath programme has not yet been signed. However, the partner universities have cooperated through the NOVA University Network on different projects, and through this network they have signed a contract that commit them to recognize the institutions involved in the network.

A common sustainable funding structure for the programme is not in place and this is critical for the future of the programme.

Two joint courses have been developed. The courses as well as the NorPath programme are fully recognized by the participating institutions. Developing joint courses are described as a resource demanding task. According to the representatives assigning a salaried coordinator to the programme might accelerate and facilitate the processes concerning jointness. However, it would not solve the more general problems of funding.

The NorPath programme is expected to provide added value when it comes to expert synergy, optimized use of resources, attracting academically outstanding students etc. Added value should be obtained by connecting the special areas of expertise at the participating institutions. Consequently the field is expected to be strengthened.

The mobility of the students is not secured other than indirectly through the individual study plans and the practical arrangements at the institutions. However, the different semester structures at the partner universities create a practical barrier to the mobility of the students and the development of joint programmes.

## **Recommendations and points for development**

- It is recommended that a formal contract should be made between the institutions involved in the NorPath programme.
- The assignment of a funded coordinator might accelerate and facilitate the process of developing the programme and establishing joint courses
- The institutions involved in the programme should develop a strategy of how the NorPath programme can be funded.
- The mobility of the students seems to be limited by the different semester structures at the universities. While it is recog-

nised that changing the structures is not an easy task, it is strongly recommended that the institutions should spare no efforts to try to overcome the problem. Developing short joint courses or e-courses may be part of a future strategy.

- It is recommended that the institutions should try to strengthen the students' NorPath identity and the sharing of knowledge among the students. This could be done through an internet forum, conferences or by extending the concept of the summer course. Another proposal is to invite both first and second year students to join the summer course. Second year students could present their ideas and considerations concerning their master's thesis and first year students will be able to find inspiration.

# Programme contents, teaching and up-to-date research

In the self-evaluation it is explained that the NorPath programme is primarily made up of already approved courses that are taught in English. Because the institutions are part of the NOVA Network the courses are automatically recognised and approved by the other institutions participating in the programme. The students can sign up for mandatory, core and elective courses. In the second year of study the students write a final research-based thesis. At KU-LIFE the students can choose to write a thesis equivalent to either 30 or 45 ECTS. At UMB the thesis corresponds to either 30 or 60 ECTS. At the site-visit it was explained that even though some of the courses at the different universities look quite similar they tend to differ because of the different profiles at the institutions involved in the programme.

The NorPath students appear to be quite free in their choice of the courses and structuring an individual study plan. The only limitation seems to be that the study plan has to contain unique NorPath elements – joint courses and the academic thesis about plant pathology. Originally the intention was to make some mobility tracks through the programme that the students could follow. However, in practice it turned out to be difficult because of the different semester structures, difference in course weight etc.

At the site-visit some of the students said, that they value the fact that they have a lot of possibilities to choose different courses and that they appreciate the opportunity to follow their interests. But, it was also noted that it might become a disadvantage if your profile gets very broad. Hence, it seems as if the loose structure of the programme favours the students who have quite a clear idea of what they want, while students who are less determined would benefit from a structure with more core courses or alternatively more advice from their tutors.

A tutor system is established at both KU-LIFE and UMB. The intention is that the tutor should help the students with mobility, facilitate the process of selecting courses and create a study plan for the students. In general the tutor system seems like a good idea, but at the site visit it became clear that some of the students were not aware that they had a tutor.

The teaching activities vary from course to course. Regular activities are lectures, theoretical discussions, written exercises and laboratory courses. The examination methods also vary in relation to the aims of the course. Frequently used methods are written examinations, multiple

choice and portfolio examination. At the site visit the students confirmed that there is variety in teaching methods and exam forms. It tends to be appreciated that there is a lot of interaction in the classes.

In the self-evaluation the teachers are described as “active researchers participating in international research, are internationally recognised and use their research-based knowledge in the teaching”. This claim is validated by the publication records of the teachers and was further supported at the discussions with the teachers at the site visits. It is noted in the self-evaluation that at KU-LIFE one full professor and three associate professors in - tenure positions can be directly linked to the programme. The researchers are supplemented by six associate professors who also contribute to the programme. At UMB three professors are directly involved in the programme. They are supplemented by researchers at ‘Bioforsk Plantehelse’ who act as supervisors of master’s thesis connected to their research projects.

## **Conclusions**

Students at the NorPath programme have a great amount of autonomy when creating individual study plans and choosing between mandatory, core and elective courses. In general the students appreciate this opportunity to follow their interests but they advocate that the process should be facilitated by advice from teachers or tutors. The role of the tutors might become even more important when SLU and HU-AF join the programme in 2009 and the number of potential courses is increased. Teaching and learning methods throughout the programme are research-oriented and vary according to the purpose of the courses. The programme is based on up-to-date research based knowledge and the teachers are active researchers who participate in international research corporation. Furthermore, there is an ongoing research corporation between (some of the) teachers at the universities involved in the programme.

## **Recommendations and points for development**

- It is recommended that the tutor system is further developed so that it becomes visible to the students at the programme what role the tutor has. This might get even more important when SLU and HU-AF join the programme and the opportunities of the students increase. Hence, it should be secured that all the students have individual study plans and that they have been facilitated by tutors.

# Relevance for professional careers

Since the NorPath programme is quite young and no graduates have yet finalized the programme, it is difficult to know how the graduates will be received on the labour market. In the self-evaluation it is stated that, based on the knowledge about candidates who have written their MSc thesis in plant pathology, it is expected that the competences and skills of the NorPath graduates will be relevant in a number of professions.

The graduates are expected to be qualified to work professionally with plant pathology in the following areas: industrial production, consultancy, trade, legislation etc. They might also be qualified to work within the area of microbial interactions such as food safety and microbial risk assessment. A third option is to apply for a PhD programme within the field of plant pathology or other related fields.

At the site visits the students maintained that even though there had been a workshop about work opportunities on the introductory summer course, they would like to receive more information about future job possibilities. The students sometimes have the chance to meet representatives from industry and future employers as a part of their courses but the contact is initiated at the faculty level and not as part of the NorPath programme. The students have been informed that they have the opportunity to continue directly from the NorPath programme to a PhD programme. However, they seem to prefer a model where they can work in a real-life-job for a couple of years and then they might consider applying to for a PhD programme.

## Conclusions

Because the NorPath programme is still quite young it is difficult to evaluate the labour market demand for graduates from the programme. However, based on the knowledge of candidates with an MSc thesis in plant pathology, it is expected that the skills and competences of the graduates will be relevant in a number of professions. The partner institutions seem to be in touch with the labour market and future employers but the arrangements are not specific to the NorPath programme. Like in many other master's programmes, teachers appear to focus, perhaps unintentionally, on a future academic career for the students. This could be expected, given the academic background of the teachers, but nevertheless, a broader perspective is needed.

## **Recommendations and points for development**

- It is recommended that the institutions develop a systematic follow up of the NorPath alumni.
- It is recommended to create a special diploma for the Norpath graduates that demonstrates their relation to NorPath and accentuates the special skills and competences the graduates have developed through the programme. The use of a common Diploma Supplement for the programme is also recommended.
- It is recommended that the partner universities apply a broad perspective on the students' future employment possibilities. Non-academic representatives should be invited to participate or lecture at the programme more often. For example at the joint summer course.



## Depth and progression

In the self-evaluation it is explained that students who wish to join the NorPath programme should hold a BSc degree (180 ECTS) in a relevant area such as Natural Science, Natural Resources, Agriculture, Plant Sciences or Biology. Non-Nordic students furthermore need to have their language skills tested through a TOEFL or IELTS test. Based on the self-evaluation it is difficult to assess the extent to which the students' prior knowledge is taken into account.

Specific criteria for admission and procedures have not been harmonised or coordinated among the partner universities. There does not appear to be a formal process of sharing information about admissions or student progress. In the self-evaluation it is explained that the question of a common admission procedure has been discussed at a meeting between the partner universities in October 2008. However, the general opinion was that it would be the most viable solution to follow the national admission procedures and the ordinary deadlines.

The NorPath programme meets the criteria of containing a main area of studies (plant pathology) amounting to a minimum of 90 ECTS (including the thesis) and a minimum extent of the thesis of 30 ECTS. At KU-LIFE the students can choose to write a thesis equivalent to either 30, 45 or 60 ECTS. At UMB the thesis corresponds to either 30 or 60 ECTS.

The learning outcomes of the Norpath programme are defined in accordance with the European Qualification Framework referring to knowledge, skills and competences. However, the learning outcomes are not defined for the joint course in 'molecular plant pathology'.

It can be difficult to assess the progression in the NorPath programme because the content of the programme depends on the students individual study plans, their specific prior knowledge as well as their choice of courses. However, supervision from the tutors, when the students structure their study plans and select their courses, might be a crucial method securing the progression in the programme.

At the site-visits it was maintained at both KU-LIFE and UMB that it may be a challenge for students to start at different levels and have varying prior knowledge. The students stated that because everybody can sign up for the courses you might have to start from scratch each time. However, it was also mentioned that it might be useful to get a brush up from a new professor who applies a different perspective to the subject.

## **Recommendations and points for development**

- It is recommended that the partner universities set common criteria for admission and agree on the procedures. An idea is to use the strictest requirements, because this will enhance the intake-quality of the programme. It should not be possible to enrol through one university if a student is not considered qualified by another university within the program.
- It is recommended that the participating institutions introduce a formal process of sharing information between programme partners about admissions and student progress.
- It is recommended that in time the universities should “classify” their courses so it is clear to the students when two courses given by different universities overlap at the same level or whether one is more basic than another.
- The programme does not fully demonstrate progression, neither in relation to a bachelors degree or within the program. The former criteria should be solved when the common admission criteria have been set. It is recommended that the students are guided through the programme from basic to more advanced courses.

# Quality assurance

In the self-evaluation the measures to secure the quality of the NorPath programme are presented. The measures are divided into general standard measures and consortium additional measures. The general standard measures secure the quality of the teaching activities through; programme approval, use of external examiners, standard course evaluation and continuing pedagogical training. The purpose of the additional measures is to make sure that the objectives of the programme are met. Students at the final stage of the programme should evaluate the programme – all graduates complete the same form. The institutions will keep in close contact with the graduates with the intention to use their inputs while developing the programme.

Students have evaluated the joint summer course and the joint course at HU-AF but the NorPath programme as a whole has not yet been evaluated. NorPath students are involved in the regular courses evaluations at KU-LIFE and UMB but it is not possible to separate the NorPath students from the other students at the programme.

At the site-visit the representatives of KU-LIFE and UMB said that it might be fruitful with a common evaluation of the NorPath programme. Discussions have been made between the participating universities about developing a concept for common quality assurance of the programme. However, it has not yet been possible to agree on the criteria. It is not completely clear who has the final and overall responsibility for the quality assurance of the programme as a whole.

Procedures of how to make the quality assurance publically available have not yet been established.

## Conclusions

Measures to secure the quality of the NorPath programme have been defined. Input and comments of students are assessed through course evaluations of the regular courses as well as the joint courses. However, the NorPath Programme as a whole has not yet been evaluated and the partner institutions have not yet agreed on a common concept for quality assurance.

## Recommendations and points for development

- It is recommended that a concept for quality assurance of the programme, recognised by all the institutions involved in the

programme, should be developed to ensure that the aims of the programme are met. Quality assurance should involve students, staff and other stakeholders and it should be clear who has the responsibility for overall quality assurance.

- It is suggested that a midterm evaluation with the group of NorPath students at each university should be arranged to discuss the possibilities and challenges the students experience at the programme. Even though the programme is still at an early stage it might be essential to get input and feedback from the students.

# Final Conclusions and Recommendations

The NorPath programme can be described as a mobility programme with two joint courses. Students can sign up for the joint courses as well as the courses offered by the participating universities. Teachers from the participating universities meet on a regular basis and a research corporation between some of the teachers involved in the programme has been initiated.

The aims of the NorPath programme are clearly stated in the self-evaluation and the representatives from KU-LIFE and UMB have a common understanding of the aims of the programme. The participating institutions have not signed a formal agreement directly regulating the NorPath programme. However, the courses as well as the NorPath programme are fully recognized by the participating institutions.

The NorPath programme currently has the status of a mobility programme or joint programme. Compared to a programme like Erasmus Mundus, the programme is quite flexible and has less of a common structure. But still the mobility of students is not secured sufficiently by the programme. The objective of the partner universities is to change the programme into a double degree programme and the long term strategy is to build a joint degree. Working on joint activities and developing joint courses are described as a resource demanding task. In a future perspective extra funding will probably be needed on a more permanent basis for joint activities. However, the partner institutions have not yet developed a common funding strategy.

Students on the NorPath programme have a great amount of freedom and flexibility when structuring their individual study plans. It seems to be essential that that the process should be facilitated by advice from teachers or tutors. With regard to the mobility of students on the programme, the different semester structures at the partner universities tend to be quite a problem. The different structures create a practical barrier to the mobility of the students and the development of joint programmes.

Teaching and learning methods throughout the programme are research-oriented and vary according to the purpose of the courses. The programme is based on up-to-date research based knowledge and the teachers are active researchers who participate in international research corporation

Because the NorPath programme is still quite young it is difficult to evaluate the labour market demand for graduates from the programme. However, based on the knowledge about candidates who have written

their MSc thesis in plant pathology, it is expected that the competences and skills of the NorPath graduates will be relevant in a number of professions.

There are no common criteria for admission and the admission procedures have not been coordinated among the partner universities. Students who want to enrol in the programme should hold a BSc degree in a relevant area. Consequently, the students can have quite different backgrounds. It is difficult to assess the progression of the students in the NorPath programme because the content of the programme varies according to the students individual study plan and their prior knowledge.

Students are involved in the evaluation of the NorParth programme through regular course evaluations and evaluations of the joint courses. However, the NorPath Programme as a whole has not yet been evaluated and the partner institutions have not agreed on a common concept for quality assurance.

## **Recommendations and points for development**

- The future status of the programme should be discussed among the partner universities. A more structured programme might be the only way to secure future funding and the mobility of the students.
- A formal contract directly regulating the NorPath programme should be signed by the participating institutions.
- The institutions involved in the programme should develop a future strategy of how the NorPath programme can be funded.
- The mobility of the students is limited by the different semester structures at the universities. It is crucial that the problem is addressed by the partner universities and that they should make considerable efforts to overcome the difficulties.
- With regard to jointness it is recommended that partner universities engage in strengthening the students' NorPath identity and the sharing of knowledge between the students.
- It is recommended that the tutor system should be further developed. It should be secured that all students have individual study plans and that they have been facilitated by tutors.
- It is recommended that the partner universities apply a broad perspective on the students' future employment possibilities. Non-academic representatives should be invited to participate or lecture in the programme.
- It is recommended that the partner universities agree on specific common criteria for admission.

- A common concept for quality assurance of the programme should be developed by the partner institutions and it should be clear who has the responsibility for the overall quality assurance.
- A midterm evaluation with the group of NorPath students at each university should be arranged to secure that input and feedback from the students are implemented.

# Appendix A: Site visit Programmes - NordMaG

## University of Jyväskylä, 18 February 2009

Visiting team: Katri Vehviläinen-Julkunen, Kirsi Hiltunen, Stefan Fors, Staffan Wahlén

- 9.00 – 9.45 Meeting with NordMaG staff**  
Professor Taina Rantanen, Lector Virpi Uotinen, University teacher Heidi Hietanen
- 10.00 – 11.00 Meeting with NordMaG teachers**  
Professor Taina Rantanen, Assistant professor Tiina-Mari Lyyra, Assistant Anne Viljanen, Lector Virpi Uotinen, University teacher Heidi Hietanen
- 11.00 – 12.15 Lunch in Restaurant Hurrikaani**
- 12.15 – 13.00 Meeting with faculty members**  
Lauri Laakso, Vice Dean, Faculty of Sports and Health Sciences  
Sanna Väisänen, Coordinator of International affairs, Faculty of Sports and Health Sciences
- 13.00 – 13.45 Meeting with three NordMaG students**
- 14.00 – 14.30 Evaluation group meeting**
- 14.30 – 15.00 Preliminary feedback to person(s) responsible for the programme**

## Lund University, 27 February 2009

Visiting team: Katri Vehviläinen-Julkunen, Stefan Fors, Karin Järplid Linde, Staffan Wahlén

- 9.00 – 9.45 Meeting with person(s) responsible for programme at the site**  
Associate Professor Torbjörn Svensson, Associate



- Pofessor Gun-Britt Jarnlo
- 10.00 – 10.45 Meeting with three NordMaG students**
- 11.00 – 11.45 NordMaG teachers**  
Torbjörn Svensson, Gun-Britt Jarnlo
- 12.00 – 12.30 Meeting with faculty representative to discuss the role of the programme in the context of the overall faculty responsibilities**  
Vice Dean Susanne Iwarsson
- 12.30 – 13.15 Lunch**
- 13.15 – 13.45 Evaluation group meeting**
- 13.45 – 14.15 Preliminary feedback to person(s) responsible for the programme**  
Torbjörn Svensson, Gun-Britt Jarnlo

**University of Iceland, 6 March 2009**

Visiting team: Katri Vehviläinen, Stefan Fors, Karin Järplid Linde and Kirsi Hiltunen

- 9.00 – 09.40 Responsible for the programme and main teacher**  
Sigurveig H. Sigurðardóttir, assisstant professor
- 09.45 – 10.30 Meeting with five NordMaG students**
- 10.45 – 11.30 Meeting with teachers**  
Steinunn K. Jónsdóttir, social worker, part-time teacher; Sigurveig H. Sigurðardóttir, assisstant professor
- 11.45 – 12.15 Faculty leadership**  
Guðný Björk Eydal, dean of the Faculty of Social Work
- 12.15 – 13.00 Lunch**
- 13.00 – 13.30 Summing up and final meeting with those responsible for the programme**
- 14.00 – 15.00 Walking tour – university buildings**

## Appendix B: Site visit Programmes - NorPath

### Site visit programme – 12. March 2009, KU – Life

<b>Time</b>	<b>Theme</b>
<b>09.45-10.00</b>	Committee meeting Anna Stina Sandelius - Professor in Plant Physiology, University of Gothenburg, Sweden Gerhard Y. Amundsen - NOKUT Vibeke Fahlén – ACE Denmark Kristine Als Velling – Danish Evaluation Institute (EVA)
<b>10.00-10.45</b>	Meeting the program coordinators
<b>10.45-11.00</b>	Pause
<b>11.00-11.45</b>	Meeting students
<b>11.45-12.00</b>	Pause
<b>12.00-13.00</b>	Lunch
<b>13.00-13.45</b>	Meeting representatives of the scientific staff
<b>13.45-14.00</b>	Pause
<b>14.00-14.45</b>	Meeting representatives of the management at the Faculty
<b>14.45-15.15</b>	Pause, internal evaluation committee meeting
<b>15.15-15.30</b>	Brief feedback to those responsible at each institution

### Site visit programme – 13. March 2009, UMB

<b>Time</b>	<b>Theme</b>
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<b>09.45-10.00</b>	Committee meeting Anna Stina Sandelius - Professor in Plant Physiology, University of Gothenburg, Sweden Gerhard Y. Amundsen - NOKUT Kristine Als Velling – Danish Evaluation Institute (EVA)
<b>10.00-10.45</b>	Meeting the program coordinators/those responsible at each institution
<b>10.45-11.00</b>	Pause
<b>11.00-11.45</b>	Meeting students
<b>11.45-12.00</b>	Pause
<b>12.00-13.00</b>	Lunch
<b>13.00-13.45</b>	Meeting representatives of the scientific staff
<b>13.45-14.00</b>	Pause
<b>14.00-14.45</b>	Meeting representatives of the management at the University
<b>14.45-15.15</b>	Pause, internal evaluation committee meeting
<b>15.15-15.30</b>	Brief feedback to those responsible at each institution

# Appendix C: Pilot evaluation criteria

## **Aims of the programme**

- The aims of programme are clearly defined
- The aims of programme are defined in terms of learning outcomes and are in line with the European qualifications framework.

## **Criteria for jointness**

- There is a formal agreement between the participating institutions
- The joint programme provides added value in relation to provision by only one institution
- The joint provision involves benefits for all the institutions taking part in the programme
- The processes of developing the aims and choosing partners for the programme are interconnected
- The managements of all participating institutions support the goals and objectives. The programme is fully recognised by all participating institutions
- Academic and administrative aspects of the programme are adequately staffed and funded. A common sustainable funding strategy is in place
- Mechanisms for cooperation are spelled out and understood by all parties
- Responsibilities are clearly defined and shared
- Information about the programme is relevant and easily accessible to students and other stakeholders
- Students are secured a stay at an institution in at least one country other than that of their home institution
- Contacts between teachers in the different institutions involved in the programme are secured through joint seminars, exchange arrangements, etc.
- Arrangements for reaching out to and receiving guest students and scholars are in place
- The infrastructure, e.g. library and other information sources, premises and equipment, in all participating institutions meets the needs of the programme

- The rights of students are secured when they attend institutions other than their home institution
- A language policy is in place.

### **Links between programme contents, teaching and current up-to-date research**

- The programme is based on relevant up-to-date research-based knowledge developed by active researchers
- Teaching is based on theoretical and/or empirical studies and practice, wherever relevant
- Teaching and examination methods support students' attaining the goals of the programme
- Teaching and assessment contribute to students' ability, in national and international contexts, to account for and discuss results and conclusions of research as well as the arguments on which they are based
- Teachers are active researchers, and 50 % of the full time equivalent staff should be senior researchers and at least 25 % should be professors and also possess the pedagogical skills needed to stimulate students to acquire the relevant competencies, knowledge and abilities
- Teachers participate in international research cooperation within the field of the study programme
- There is an active and keen research environment which also provides PhD programmes. Students should be involved in this environment, and successful completion of the programme should make students eligible for relevant PhD programmes.

### **Relevance for future professional careers**

- There is labour market demand for graduates from programme
- Successful completion of the programme makes graduates eligible for employment with high demands for independent work related to research and development or other qualified employments
- There are regular contacts between the programme and employers.

### **Depth and progression**

- The programme is planned and organized as a unit in which the courses contribute to the whole. It is relevant, up to date and real-

istic in relation to learning outcomes specified and the length of the programme

- Learning outcomes for the Master's level are clearly defined and cover knowledge and abilities in the main area of study as well as generic skills
- The programme is based on the students' expected prior knowledge (a first level degree)
- The programme includes a main area of studies amounting to a minimum of 60 ECTS
- The infrastructure contributes to student learning and there are sufficient library, IT, laboratory and other resources available
- There are links between the learning outcomes and the organization of teaching
- The programme demonstrates progression internally and in relation to relevant bachelor programmes
- The minimum extent of the thesis is 30 ECTS.

## **Quality assurance**

- The programme has a system which assures the quality of the joint provision, and guarantees that the aims of the programme are met. The programme continuously collects information both for this purpose and for the further development of the programme. This system is recognized by all the institutions represented in the consortium, and includes recognition of the programme by all institutions involved
- Quality assurance practices involve students (e.g. course evaluations), staff and other stakeholders from all participating institutions
- There is adequate provision for teachers' academic and pedagogical development
- Quality assurance includes coordination of assessment across the whole programme to ensure that all of its expected competences/learning outcomes are met
- Reports on results of quality assurance activities are publicly available.