Evaluation of the proposed postgraduate Master of Science degree program in ‘Veterinary Science’ of the Faculty of Veterinary Medicine, Utrecht University

1. Introduction
The evaluators were invited by the EAEVE, as the Quality Assessment Agency for the NVAO for veterinary education, to evaluate the new postgraduate Master of Science degree program in ‘Veterinary Science’ of the Faculty of Veterinary Medicine at the University of Utrecht. Simultaneously seven other evaluators of AVMA/CVMA and EAEVE evaluated the undergraduate veterinary degree programme of the Faculty of Veterinary Medicine.

This new Master of Science degree program in ‘Veterinary Science’ is based on the amalgamation of the four existing Masters programs in Veterinary Epidemiology and Economics (VEE), Animal Pathology (AP), Veterinary Anaesthesiology (VA) and Laboratory Animal Science (LAS). It is expected that the new degree program will start in September 2008. Each of the current four individual Masters programs has demonstrated its value and they all have well established course programs. Each has approved objectives, is taught by efficient and competent faculty, and is functioning satisfactory. Following our detailed discussion with each of the program faculty, evaluators were extremely satisfied that as a group they provided a very solid foundation for the proposed new master degree program. Further comment on these four programs is provided within the detailed evaluation because it is their underlying strong foundation that is the strength of the proposed new Master of Science degree program in ‘Veterinary Science’. The self study document, as expanded upon by the administration in subsequent discussions, and our on-site assessment provided ample information upon which we can provide our evaluation of these individual parts, as well as the Master of Sciences degree in ‘Veterinary Science’ as a whole.

2. One Degree Program “Veterinary Science”
The timing for joining the four established Masters programs in Veterinary Epidemiology and Economics (VEE), Animal Pathology (AP), Veterinary Anaesthesiology (VA) and Laboratory Animal Science (LAS) into a new Master of Science degree program in ‘Veterinary Science’ is appropriate. Each course is taught primarily by staff from the veterinary faculty, and each is part of an effort by the school to consolidate and further expand its international profile. The majority of students currently in the program, or who have graduated from it, are international students and this remains the plan and focus for the future Master of Science in ‘Veterinary Science’ degree. Combining the four programs into a single degree program will be of distinct benefit to the students, and especially those which currently attract smaller numbers of students (VA and LAS). A single set of overall program guidelines will avoid ambiguity with respect to expectations and allow the students to share common goals. The shared knowledge and expertise that exists in the four separate programs will be more easily accessible to students if components are part of a single degree program and this should enrich their experience. Coordinated management and course structure will be beneficial to the teaching efficiency. A single degree program will also be better able to respond to new developments in science, since within this structure a single degree program can be more easily altered or a new program added. It will also be easier to negotiate funding arrangements with the board of the university, since the combined degree program has larger student numbers.

3. The International Context
One important characteristic of Utrecht University’s Faculty of Veterinary Medicine (FVM) is its focus on education and research strongly emphasizing the need to be competitive at an international level, and thereby offering postgraduate courses targeted at international students. This global mission is coordinated through the Faculty’s Office for International Cooperation (BIC). The current Masters programs started with a single course in ‘Herd health’ resulting from a long tradition of the FVM to work in this area of veterinary medicine. The first applications were mainly from Asia for Epidemiology...
and from Africa for Pathology. A major objective of all four Master programs, to be continued with the Master degree program in ‘Veterinary Science’, is the training of students from developing countries in scientific research skills. The four original Masters programs which are now proposed to be combined into a single Master of Science degree program in ‘Veterinary Science’, are managed by the Office for International Cooperation of the FVM and 95%+ of the students originate from non-EU countries, especially from Asia.

The international emphasis of the FVM is reinforced in its Mission statement: “The Faculty of Veterinary Medicine (FVM) is internationally leading in the fields of veterinary scientific education, research and animal patient care.”

The postgraduate education programme of FVM includes the Masters and PhD programs and the training of veterinary specialists. The postgraduate Masters program is delivered in the English language. Of the 134 participants since 1994, 108 came from outside the Netherlands. Recruitment of candidates is on the international educational market. The PhD training program is part of the research programs of the Institute of Veterinary Research (IVR). All programs have an international orientation and discussions, reports, publications and thesis defence are in English. Approximately 30% of the 150 registered PhD students are from outside the Netherlands. The PhD program at FVM offers opportunities for excellent Master students to continue with their PhD at FVM. Between 25-40 staff members are being trained as veterinary specialists and are preparing for the Diplomate examination of the respective European or American Boards. Amongst these are a small number of international specialists in training who have to be competent in the Dutch language as this is required for patient owner contacts.

FVM has taken the lead to initiate and execute projects under the Asia Link program of the EU for institutional collaboration between universities in Europe and Asia. The BIC coordinates 4 projects involving faculties in Europe (Netherlands, Sweden, Belgium and UK) and in Asia (Thailand, Vietnam, Sri Lanka and Malaysia), during the period 2004 to 2010. The research training of Asian postgraduate students on reproduction of domestic and wild animals and animal nutrition in Asia creates an excellent international scientific learning environment.

4. The National Context of the Current Programs and New Master Degree

In the Netherlands there are no other universities offering Master programs similar to the original four Master programs offered by the FVM of UU (now to be combined into a single degree program). The unique position of the FVM to be the only veterinary faculty in the Netherlands strengthens the national position of these 4 programs and will likewise strengthen the position of the combined Master degree.

The four component programs each have several unique historical characteristics. The 18 months Master program on Laboratory Animal Science (LAS) is unique in the Netherlands and has been designed in consultation with the universities of Groningen and Nijmegen, and the National Institute for Public Health and the Environment (RIVM) in the Netherlands. A significant advantage of the Master program LAS is that it includes all components conferring to ‘Article 9 of the national law’ and ‘Art. 19.d of the EU Council Directive 86/609’. Graduates obtain their Master of Science degree and their licence to work with experimental animals at the same time. A comparable Master program on laboratory animals is offered at the University Gent (Belgium) and the University of Copenhagen (Denmark). The program in Belgium has a 60 ECTS study load and the one in Denmark 45 ECTS. The program at FVM has a study load of 90 ECTS as a result of a larger research component. The program at FVM has a potential to grow as more eastern European and Asian countries are interested to send their laboratory animal veterinarians for further academic training. The faculty staff of this program has specific expertise in this key area of veterinary medicine. The demand for postgraduate training in Laboratory Animal Science is expected to grow exponentially over the next decade. FVM is in a unique position “to lead the way” not only in Europe but globally.
Programs comparable to the Master programs in Animal Pathology (AP)/Veterinary Pathology (VP) could not be identified in Europe. Master programs in pathology are well developed at veterinary colleges in USA and Australia, which also means that there is no competition in Europe at the Master level. While most veterinarians who wish to become pathologist choose to follow the specialist training route (residency), the Master in AP is ideal for those who require short-term continuing education at academic level. The Master in AP program is an ideal stepping stone for those who wish to enrol in a residency program in this area but do not have the necessary expertise. This is a unique aspect of this particular program, and is of particular importance for international students.

The situation for Veterinary Anaesthesiology (VA) is even more unique as other Master in this field could not be identified. While again most veterinarians who wish to continue in anaesthesiology choose to become specialists, the Master in VA program is likewise an ideal stepping stone for those who would like to enrol in a residency program in this area but do not have the necessary expertise. It is also undertaken by those who require short-term continuing education at academic level in VA. As with the Master in AP, this is a unique aspect of this particular program, and is of particular importance for international students.

Epidemiology is more widely taught in Europe than the other three areas discussed above. A postgraduate Master program is taught at the Faculty of Medicine of UU in collaboration with the Erasmus University of Rotterdam and the Master program Veterinary Epidemiology and Economics (VEE) of FVM. On the European educational market, postgraduate veterinary epidemiology Master programs are taught in English only by the Royal Veterinary College, University of London (as a distance learning and an on-site training program). There are some related Master courses, such as Tropical Animal Health (Prince Leopold Institute of Tropical Medicine, Antwerp), Veterinary Public Health (Free University of Berlin, University of Copenhagen and Norwegian School of Veterinary Science) and International Animal Health (University of Edinburgh). As in the case of the on-site veterinary epidemiology at Royal Veterinary College in London, the close link of the Master in VEE program with the medical epidemiology training at UU is a particular strength of the program. Having only one direct competitor on the European market gives the FVM program an opportunity to strive for further quality enhancement. As for the other three programs, VEE offers international students a critical stepping stone into the more standard avenues in developed countries of PhD and residency programs.

5. The Assessment Framework

The evaluators were invited by the EAEVE, as the Quality Assessment Agency for the NVAO for veterinary education, to evaluate the new postgraduate Master of Science degree program in ‘Veterinary Science’. The evaluation protocol of QANU (a NVAO-recognised Dutch Assessment Agency) was used for the evaluation.

Because this new Master of Science degree program in ‘Veterinary Science’ is strongly based upon four existing program it was decided by the two evaluators to use a combination of the QANU PROTOCOL for existing programs and the NVAO Accreditation framework of new degree courses. In accord with the state guidelines, existing programs should be evaluated using the set of 21 facets defined by the “QANU PROTOCOL Guide to external quality assessment of bachelor’s and master’s degree programmes in research orientated universities (version 3.1.e)”. New programs, however, should be evaluated in accord with the NVAO document “Accreditation framework of new degree courses (14 februari 2003). The latter provides a modified definition of 16 of the facets (1-9, 12-17 & 19) and does not refer to the other 5 facets (10, 11, 18, 20, 21 defined in the QANU PROTOCOL, but provides one additional facet (defined here as facet 22) not stated by the QANU PROTOCOL.

In the evaluation report we have provided a listing of the criteria for each facet (as defined by the QANU PROTOCOL with the modifications defined by NVAO for new programs) followed by our evaluation of the program as it relates to the specific NVAO facet. Because of the new Master of Science in ‘Veterinary Science’ degree being based upon the existing four Master programs, which
indeed is a major strength of the new degree program, we have provided our evaluation based upon all 22 facets and, as appropriate, given a rating both for the newly proposed Master of Science degree program in ‘Veterinary Science’ and the current existing individual Master programs as appropriate. We believe that this approach will allow the most accurate and detailed evaluation of the new degree program. It will be seen that in a number of cases the overall degree program received a lower rating than the individual components. In almost all circumstances this is because the new degree program has not yet been initiated and thus there is insufficient current data to rate it higher. This is only in terms of whether the evaluation is at one of the three higher levels of evaluation: Adequate, Good, or Excellent. The two evaluators are confident that once the joint degree program has been initiated it will soon be able to meet the higher ratings currently achieved by the individual programs. The new Master degree will not be implemented until September 2008 and the first cohort of students will not have completed it until early 2010.

The rating scale that we have used for both the degree program and the individual programs is that defined by the QANU protocol of:

Poor: The quality level is below the basic standard
Adequate: The quality level corresponds to the basic standard for university degree programs
Good: The quality level exceeds expectations, thanks to well thought-out policy
Excellent: The quality level is very good in all respects and can withstand comparison with international competitors

6. Evaluation Procedure
This evaluation has been conducted by the EAEVE approved evaluators Prof Dirk Pfeiffer, Royal Veterinary College, University of London, England and Prof Donal Walsh, School of Veterinary Medicine, University of California, Davis. The evaluation is based upon extensive data provided by the Faculty of Veterinary Medicine, Utrecht University, and by a site visit and interviews conducted by Profss Pfeiffer and Walsh, November 4th-8th 2007. The site visit schedule is presented in Appendix 2. Prior to their visit the site visit team was provided an extensive amount of information including a Self Evaluation Report. Following their initial assessment and in response to a specific request, the site visit team was provided further information, some as written addenda addressing issues for several of the specific facets. Portions of the provided addenda are contained in this report. Brief CVs for each of the two evaluators are provided in Appendix 1.

7. Areas of Evaluation
Evaluation has occurred in all areas defined by the QANU and NVAO facets especially using the “Criterion” and “Checkpoints”. This has resulted in evaluation relating to each of the following features:

- Objectives of the degree program
- Program
- Relationship between aims and objectives and contents of the degree program
- Coherence of program
- Study load
- Student Intake
- Duration of the degree program
- Coordination of structure and contents of the degree
- Assessment and examinations
- Deployment of staff
- Quality and Quantity of staff
- Facilities and provisions
- Student support and guidance
• Internal quality assurance
• Involvement of staff, students, alumni and the professional field
• Conditions for Continuity
8. Assessment of Each Facet

Topic 1: Objectives of the degree program (Facets 1, 2 and 3)

Facet 1: Domain-specific requirements

Guidance provided by QANU Protocol

Criterion
The final qualifications of the degree course correspond to the requirements made to a degree course in the relevant domain (field of study/discipline and/or professional practice) by colleagues in the Netherlands and abroad and the professional practice.

Checkpoints
- The objectives of the programme comply with national and international academic and professional norms.
- The final qualifications of the programme, which describe the qualifications a graduate should have acquired, are derived from the objectives.
- The final qualifications of the programme comply with national and international domain-specific requirements.
- The final qualifications of the programme meet the requirements of professional practice.

New Degree Courses
The intended final qualifications of the degree course correspond to the requirements made to a degree course in the relevant domain (field of study/discipline and/or professional practice) by colleagues in the Netherlands and abroad and the professional practice.

Description and Evaluation Procedure
In accord with the self study addenda provided (see item #5 Evaluation Procedure), the objective of the Master of Science degree program in ‘Veterinary Science’ is to educate veterinary graduates at postgraduate Master level in acquiring knowledge, skills and capacities to be able to conduct independent research in a multidisciplinary setting in one of four domains of the veterinary sciences. This includes achieving the following final qualifications and competencies:

i. The graduate will be competent in state-of-the-art knowledge in veterinary science.

ii. The graduate will have acquired advanced knowledge and skills in a specific domain of veterinary science.

iii. The graduate will have acquired knowledge about modern principles of quality standards and ethical handling.

iv. The graduate will be able to critically review results, arguments and problem formulations.

v. The graduate will have demonstrated communication skills at a scholarly level.

vi. The graduate will have the scope to be able to independently design research protocols based on hypotheses.

vii. The graduate will have the demonstrated the capability to plan, organise and implement or coordinate research projects.

viii. The graduate will be able to analyse research outcomes using appropriate (statistical) methods.

ix. The graduate can validate and discuss animal science research findings in a scientific, a multidisciplinary and a societal and practical context.

x. The graduate can communicate report and publish research findings and implications at an international scientific as well as at a non-specialist level.

xi. The graduate will have mastered a range of specialist topics that will enable s/he to advance to further academic studies (such as a PhD).

Assessment
Within the context that the proposed Master of Science degree program in ‘Veterinary Science’ has four well defined areas of speciality, namely Veterinary Epidemiology and Economics, Veterinary Pathology, Veterinary Anaesthesiology and Laboratory Animal Science, these rather broad and generalistic objectives are fully appropriate. With time it would be appropriate to amalgate the individual section objectives into the framework of the overall veterinary science master degree program objective so that it is very clear that it is only within the scope of these four areas that these objectives
are to be achieved. The final qualifications of the *Master of Science degree program in 'Veterinary Science'* are well defined by the individual set of objectives of the program (as defined above), and readily comply with national and international areas of expertise. This is especially emphasized by the high success rate of students from the program readily entering into the next appropriate stage of training in PhD and residency programs in the Netherlands or abroad, and/or entering into professional practice in their country of origin.

As has been emphasized by the National Research Council (USA) of the National Academics 2005 report “Critical Needs for Research in Veterinary Science”, that whereas research in veterinary science is critical for the health and well-being of animals (including humans) too few veterinarians are pursuing research careers, and there is a clear shortage of facilities and funding for conducting such research. The master programme in Veterinary Science proposed by the Faculty of Veterinary Medicine of Utrecht University will especially provide the opportunity for potential internationals scholars to become qualified to enter into this market, and this is a highly laudatory objective. The proposed masters’ degree education has the advantages that although the financial barrier, remains quite high for these international students, it is reachable. The graduates will be well prepared to enter into the labour market within their home countries (as currently occurs within the structure of four separate program), but with time and refinement the one single masters program should be enriched by better cross fertilization between the four parts. This is a goal that should be set by the program administrators and by the Faculty of Veterinary Medicine. All this is highly creditable

As the *Master of Science in Veterinary Science* develops the faculty are encouraged to create strategies to individually assess that each student reaches each of the 11 qualifications and competencies specifically stated above.

**Rating(s) for Facet 1**

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Adequate (but expected to reach higher levels once program has been initiated and better integration achieved)</th>
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<tbody>
<tr>
<td>VEE</td>
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<td>AP</td>
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<td>VA</td>
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<td>LAS</td>
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Facet 2: Level

Guidance provided by QANU Protocol

Criterion
The final qualifications of the degree course correspond to general, internationally accepted descriptions of the qualifications of a Bachelor or a Masters.

Checkpoints
- The level defined by the final qualifications corresponds to the Dublin descriptors of the level (bachelor of master) of the programme (or to other internationally accepted level descriptors).

New Degree Courses
The intended final qualifications of the degree course correspond to general, internationally accepted descriptions of the qualifications of a Bachelor or a Master.

Description
As there are no Dublin descriptors for a postgraduate Masters course, the FVM of Utrecht University created an equivalent set of “Dublin Descriptors for a professional Masters that they provided in the Self Evaluation Report”.

<table>
<thead>
<tr>
<th>Knowledge and understanding</th>
<th>Applying knowledge and understanding</th>
<th>Making judgements</th>
<th>Communication</th>
<th>Learning skills</th>
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<td>Have demonstrated knowledge and understanding that is founded upon and extends and/or enhances a complete academic study (BaMa) and that provides a basis or opportunity for originality in developing and/or applying ideas in a professional, often a research, context.</td>
<td>Can apply their knowledge and understanding and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to a profession in its broadest sense; have the ability to integrate knowledge and handle complexity.</td>
<td>Can formulate judgements and apply solutions with incomplete or limited information that rather include reflection on social and ethical responsibilities linked to the application of their knowledge and judgements.</td>
<td>Can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously, including university students and can develop scientific ideas and communicate and discuss these at an academic level.</td>
<td>Have the learning skills to allow them to continue to study in a manner that is self-directed or autonomous.</td>
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Assessment
The program is certainly directed at meeting the stated criterion for facet 2. The committee appreciates the Faculty’s efforts to create the new “Dublin” descriptors, agrees with this proposed set of descriptors, and believes them to be suitable and achievable targets. On the basis of the proposed descriptors, four current masters programs certainly meet these descriptors and therefore the MSc in Veterinary Science will do likewise. The four are each quality programs with appropriate criteria for attainment of “Knowledge and Understanding”, “Applying knowledge and understanding”, “Making judgements”, and “Communication and learning skills”. The programme has entry level of a minimum of a DVM or BVSc degree (minimal 5 years university education). The requirement of publishing papers attests to the ability of MSc students of applying their knowledge in a scientific way. Many of the publications to date have been of high quality and the MSc student is often first author.
Rating(s) for Facet 2

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<td>VA</td>
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<td>LAS</td>
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Facet 3: Orientation

Guidance provided by QANU Protocol

Criterion
- The final qualifications are based on requirements made by the academic discipline, the international academic practice and, if applicable to the course, the relevant practice in the prospective professional field.
- A University (WO) bachelor possesses the qualifications that allow access to a minimum of one further University (WO) degree course at master's level as well as the option to enter the labour market.
- A University (WO) master possesses the qualifications to conduct independent academic research or to solve multidisciplinary and interdisciplinary questions in a professional practice for which a University (WO) degree is required or useful.

Checkpoints
- The final qualifications of the undergraduate degree match the entry requirements for at least one postgraduate degree programme and possibly the level of competence required to enter the labour market.
- The final qualifications of the postgraduate degree include conducting independent academic research or solving multidisciplinary and interdisciplinary questions in a professional field for which an academic degree is required or useful.
- The final qualifications of the degree programme adequately cover the general characteristics of academic training.

New Degree Courses
The intended final qualifications of the degree course correspond to the following descriptions of a Bachelor and a Master at universities and universities of professional education (from Orientation University of Professional Education (HBO/University (WO)):
- The intended final qualifications are based on requirements made by the academic discipline, the international academic practice and, if applicable to the course, the relevant practice in the prospective professional field.
- A University (WO) bachelor possesses the qualifications that allow access to a minimum of one further degree course at University (WO) master's level as well as the option to enter the labour market.
- A University (WO) master possesses the qualifications to conduct independent academic research or to solve multidisciplinary and interdisciplinary questions in a professional practice for which a University (WO) degree is required or useful.

Description
All the current programs have a large research component (60 ECTS) which enables students to perform independent research and analyse data and apply theoretical concepts in practice. The proposed veterinary science masters will have the same criteria. The interactive science training and theoretical courses train the students in academic communication and critically reflect on their own and others’ reasoning. The MSc students follow “ABC” seminars with a broad variety of topics in relevant academic disciplines. The ABC seminars are a series of monthly seminars organised by the Academic Biomedical Centre (ABC, is a centre for research collaboration between the Faculties of Veterinary Medicine, Medicine and Science) and provide the students with interdisciplinary insight in scientific development. Overall the programs help students to develop skills and encourages them to a life long learning attitude. As stated by one of the course directors: “We are not training technicians, we want them to reason and argument. It is a scientific profession.”

Assessment
The program definitely meets the stated criterion for Facet 3. The committee feels that the programs are an excellent stepping stone for international students to either continue into a PhD programme, a residency, or enter into the labour market back in their home country. This conclusion is well supported by the subsequent career tracks of previous graduates from the four programs. The research component is large and the teachers that guide the students are themselves gifted researchers.
Rating(s) for Facet 3

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**Topic 2: Programme (Facets 4 -11)**

**Facet 4: Requirements University**

**Guidance provided by QANU Protocol**

**Criteria**
- The students acquire knowledge on the interface between teaching and academic research within the relevant disciplines.
- The programme follows the developments in the relevant academic discipline(s), as it is demonstrated that it incorporates current academic theories.
- The programme ensures the development of skills in the field of academic research.
- For those courses for which this is applicable, the course programme has clear links with the current professional practice in the relevant professions.

**Checkpoints**
- The teaching and learning interacts with the development of science and knowledge.
- The teaching and learning adequately covers the domain-specific and generic features of academic education mentioned in the previous section, at the appropriate level.
- The programme has links with professional practice in the relevant fields.

**New Degree Courses**
The intended programme meets the following criteria applicable to a degree programme at a University of Professional Education (HBO) or a University (WO) [based on Requirements University of Professional Education (HBO)/ University (WO)]:
- The students acquire knowledge on the interface between teaching and academic research within the relevant Disciplines.
- The programme follows the developments in the relevant academic discipline(s) as it is demonstrated that it incorporates current academic theories.
- The programme ensures the development of skills in the field of academic research.
- For those courses to which it is applicable, the course programme has clear links with the current professional practice in the relevant professions.

**Description**
All Master programs included in the new degree program have a research component of 12 months and the proposed Master of Science in ‘Veterinary Science’ degree program do likewise. The research project of a Master of Science (MSc) student matches the overall research program of the university (in relation to focus and extent) or those of the Faculty of Veterinary Medicine, with regard to the research program on Advances in Veterinary Medicine. The students work closely with lecturers and PhD students. The research mentors have solid to excellent research credentials.

**Assessment**
The program clearly meets the stated criteria and checkpoints for Facet 4. The committee believes that the structure of the curriculum allows strong and effective linkages between teaching and academic research. The program performs well in an international comparison and addresses global training needs in the areas covered by the program. The high output of published papers by staff and students is evidence of its high standard and presence of effective linkages with current research practice. The significant level of research expected from students ensures the development of skills in the field of academic research by the candidates. Importantly, all of the course programs had clear links with the current professional practice in the relevant professions, providing the essential interface for student development. The evaluators consider it essential that all students are required to publish. This would
assure that all students meet the criteria of achieving a suitable level in relation to “Learning skills” as defined in the modified Dublin descriptors. Likewise, the evaluators encourage that the programs should aim for students to have their own research topic which should have clearly defined outcomes and not just have a support function for other projects at the faculty. The latter currently seems to be relatively often the case in at least one of the existing programs.

Rating(s) for Facet 4

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Facet 5: Relationship between aims and objectives and contents of the programme

Guidance provided by QANU Protocol

Criteria
- The course contents adequately reflect the final qualifications, both with respect to the level and orientation, and with respect to domain-specific requirements.
- The final qualifications have been translated adequately into learning targets for the programme or its components.
- The contents of the programme offer students the opportunity to obtain the final qualifications that have been formulated.

Checkpoints
- The learning objectives of the various parts of the programme are such as to ensure adequate achievement of the learning outcomes set.
- Curriculum content and structure are effective in allowing achievement of the final qualifications aimed at.
  - the level of the content is in line with the phase of the programme;
  - the programme promotes academic and intellectual growth.

Guarantees are in place to ensure that the curriculum followed in flexible programmes (where each student follows the learning path best suited to him or her) offers an effective means of achieving the final qualifications aimed at, and the criteria for approval by the examination committee are concrete and clear.

New Degree Courses
- The intended programme, the didactic concept, the methods used and the way in which the course is examined reflect the final qualifications that are to be achieved upon graduation from the degree course.
- It is demonstrated that the final qualifications have been translated into learning targets for the intended programme or its components.

Definition
The self study document provides details of the four existing MSc degree programs that will in 2008 become the four components of the Master of Science in ‘Veterinary Science’ degree program. The self study addenda provided the definition of the four component parts as they will be integrated into the new Master of Science in ‘Veterinary Science’. Also provided was a draft definition of how the program components will provide the necessary training to achieve the specified eleven final qualifications and objectives.

Assessment
The self study addenda provide a course structure for the degree program Master of Science in ‘Veterinary Science’ and a program structure for each of the four component parts that matches that of the overall Master of Science in ‘Veterinary Science’ degree program in both equivalent topic designations and length and depth of study of each component part. Sufficiently detailed learning outcomes are in place for the individual four components which allow the conclusion that these will be translated into adequately detailed learning outcomes for the overall Master of Science in ‘Veterinary Science’ degree program. During further development of the program upon its initiation in summer 2008, one can be confident that further definition will occur. A set of eleven general objectives are provided for the overall Master of Science in ‘Veterinary Science’ degree program (see above Facet 1). These eleven objectives and qualifications can reasonably be expected to be achieved by the separate components of the program as defined in the addendum provided for Facet 5. As the Master of Science in ‘Veterinary Science’ degree program evolves in the 18 months following its initiation in September 2008 it can be reasonably expected that this set of objectives will be defined in greater detail and this should be set as an early objective for the program directors and the Board of Studies of the Master of Science in ‘Veterinary Science’ program (as defined in the self study document on p.15) to achieve. Eventually a worthy goal would be to define the outcomes of the Master of Science in ‘Veterinary Science’ degree program to similar degree of detail as has been done by the FVM for the DVM curriculum (see “Programme Outcomes of the Veterinary Curriculum January 2006 Universiteit Utrecht”). The FVM of the Utrecht University are one of the true leaders in the definition of detailed learning outcomes for veterinary degree course. Since many of the faculty involved in the veterinary undergraduate course curriculum are also faculty in the Master of Science degree program, it should be possible to benefit from the experience gained when developing the postgraduate learning outcomes. In
any case, significant information on the learning outcomes is already available for the individual four current MSc programs which will allow quick progress when translating these for this new degree.

**Rating(s) for Facet 5**

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<td>LAS</td>
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</tbody>
</table>
Facet 6: Coherence of Program

Guidance provided by QANU Protocol

Criterion
Students follow a programme of study that is coherent in its contents.

Checkpoints
- The contents of the various parts of the curriculum are well matched. Students continue to build on acquired knowledge and skills, and unnecessary overlap or repetition is avoided.

New Degree Courses
The intended programme is coherent in its contents.

Description
(Adapted from the Self Study Addendum)
Regular meetings of the Educational Board involving the program directors, the Director of the Academic School and the student representatives should be conducted to ascertain the coherence and standard of the educational program. To further streamline the common approach, program components such as teaching methods, student evaluation, course module evaluation, methods for supervision of research project etc. are to be discussed and modifications made as needed. Regular contacts between the program director and the relevant teaching staff and student supervisors need to take care of translating the common objectives into practice of teaching and guidance.

The course evaluations will include questions on how a specific course module has contributed to the overall objective (training to perform independent research) and how it contributes to the end qualifications of the Masters of Veterinary Science degree.

The intake requirements for the Master degree program include: (i) Veterinary Science (Veterinary degree, DVM or BVSc; (ii) 5 years veterinary education; (iii) 1 year relevant professional work experience; and (iv) adequate knowledge of the English language). Their purpose is to guarantee that participants are of the same minimal professional veterinary background and level which leads to a uniform group of students who can broaden their professional and social scope through study and mutual contacts.

Linkages exist with other organisations/institutions external to the Faculty of Veterinary Science as part of teaching or research in several of the existing MSc courses. As an example, the MSc VEE combines some lecture teaching with the MSc Epidemiology at UU. While this will complicate administration and the development of coherent course goals, the exposure of the Master students and academic staff to these other organisations and their students/staff is of significant benefit in terms of achieving optimal learning outcomes.

Assessment
In the current four separate Master degree programs each program of study is acceptably coherent in its individual content. The contents of the various parts of each of the four curricula appear reasonably well matched with students building on acquired knowledge and skills throughout the 18 months of the course. Unnecessary overlap or repetition appears to have been avoided. This set of courses forms the foundation for the four programs within the new Master of Science in ‘Veterinary Science’ degree program and continuation of the coherence in each can be very reasonably expected. Since each of the four component parts have separate objectives, it has to be expected that overall coherence will be at a more general and less specific level in the overall Master of Science in ‘Veterinary Science’ degree program. It is to be expected that the general performance expectations from students will be identical throughout the program although definition of this appropriately awaits the actual implementation of the Master of Science in ‘Veterinary Science’ degree. The newly constituted Educational Board will have an essential role in ensuring excellence in governance of the Master of Science in ‘Veterinary Science’ degree and provides an excellent mechanism ensuring that the current four programs will become coherent and consistent parts of the whole.
Rating(s) for Facet 6

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Adequate - Will surely reach higher levels once program has been initiated</th>
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<tbody>
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<td>Good as an individual program</td>
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</table>

Facet 7: Study Load

Guidance provided by QANU Protocol

Criterion
The program can be successfully completed within the set time, as certain programme-related factors that may be an impediment to study progress are removed as much as possible.

Checkpoints
- The planned study load corresponds adequately to the actual study load and is distributed uniformly over the program.
- The program contains no unnecessary obstacles or other factors that hinder study unnecessarily.

New Degree Courses
The intended program can be successfully completed within the specified time, as certain program-related factors that may be an impediment to study progress are removed as much as possible.

Description
The study load of the new degree course contains 90 ECTS spread out over 18 months. The existing programs prove to be in balance because most students complete their Masters studies with success in the designated period of time. This is achieved by close and intensive student guidance.

Assessment
The evaluation committee considers that the study load is reasonable for what is taught, and that it is distributed uniformly over the program and between the individual components. The program contains no unnecessary obstacles or other factors that hinder study unnecessarily. Students concurred with this assessment and in general were comfortable with the pace of the program. One exception may be LAS where there is some ambiguity as to the quality of grading the required reports that are the method of assessment of all but one of the required courses. Countering this, however, are the clearly high quality and standards of the faculty. It is at this stage too early to fully judge what will be the expectations when the four current courses are combined into one but there is no reason to assume an alignment much different from that occurring currently with the individual courses.

Rating(s) for Facet 7

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<tr>
<th>MSc in Veterinary Science</th>
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<td>VA</td>
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<td>LAS</td>
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</table>
Facet 8: Intake

Guidance provided by QANU Protocol

Criterion
The structure and contents of the programme are in line with the qualifications of the students that embark on the degree course:

- Bachelor’s degree at a University (WO): VWO (pre-university education), propaedeutic certificate from a University of Professional Education (HBO) or similar qualifications, as demonstrated in the admission process.
- Master’s degree programme: bachelor’s degree and possibly (content-based) selection

Checkpoints
- Appropriate intake requirements exist for all student intake groups, and checks are carried out to ensure that students meet these requirements.
- Students entering the programme have in general no problems in meeting the course requirements.
- The information given to students before entry provides an adequate, realistic picture of the programme and of career prospects after graduation.

New Degree Courses
The structure and contents of the intended programme are in line with the qualifications of the students that embark on the degree course:

- Bachelor's degree at a University of Professional Education (HBO): VWO (pre-university education), HAVO (higher general secondary education), middle management training or specialist training (WEB) or similar qualifications, as demonstrated in the admission process
- Bachelor's degree at a University (WO): VWO (pre-university education), propaedeutic certificate from a University of Professional Education (HBO) or similar qualifications, as demonstrated in the admission process
- Master's degree at a University of Professional Education (HBO) or University (WO): bachelor's degree and possibly selection (on contents of the subject)

Description
All MSc applicants for the new degree course must have a DVM or BVSc degree (with minimal 5 years veterinary university education).

Assessment
The programs clearly reach out internationally to a broad variety of regions and countries where standards of the DVM degree clearly vary. This creates some difficulty for the faculty to ensure students are appropriately meeting intake requirements. The Office for International Cooperation plays an important role in recruiting qualified students and does an excellent job in ensuring they meet the required level of qualifications. The program does exceptionally well to provide quality to those students during their training, however, attention must be paid to the differences in DVM degrees. With very few students entering the VA and LAS courses (~ 1 per year) it is difficult for the faculty to set objective standards for their admission and progress. Overall, however, the work of the Office for International Cooperation is exceptional. The extent of their international contacts would be the envy of any institution and the Office is surely at the “top of the game” in identifying quality international candidates, even though such a process is fraught with immense difficulty.

Rating(s) for Facet 8

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Facet 9: Duration

Guidance provided by QANU Protocol

Criterion
The degree course complies with formal requirements regarding the size of the curriculum:
• Bachelor of a University: 180 credits as a rule
• Master of a University: a minimum of 60 credits, dependent on the relevant degree course

Checkpoints
• for Bachelor’s degree programmes: the programme normally has a workload of 180 credits;
• for Masters degree programmes: the programme normally has a workload of 60 credits.

New Degree Courses
The degree course complies with formal requirements regarding the size of the curriculum:
• Bachelor of a University of Professional Education (HBO): 240 credits
• Bachelor of a University (WO): 180 credits as a rule
• Master of a University of Professional Education (HBO): a minimum of 60 credits
• Master of a University (WO): a minimum of 60 credits, dependent on the relevant degree course

Description
The study load of the new degree course consists of 90 ECTS spread out over 18 months.

Assessment
There was some ambiguity in the discussion in relation to how long students took to complete the degree. There was also some ambiguity as to just how many students completed a research project as a criterion for graduation. More consistency needs to be applied. Since these are clearly “research degrees” and the research project makes up 2/3rd of the program then ALL students should be required to complete a research project. Some students were permitted to “work” with faculty on the faculty member’s project rather than work on their own project with its own independent hypothesis. The latter is not ideal, and if considered necessary should involve a significant degree of independent research. It is acknowledged that there is a benefit for students to be involved in larger research projects and the associated research teams, but it is still important that they conduct independent research within this context (such for example successfully practised in VEE).

Rating(s) for Facet 9

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Facet 10: Coordination of Structure and Contents of the Degree

Guidance provided by QANU Protocol

Criteria
- The didactic concepts are in line with the aims and objectives.
- The teaching methods correspond to the didactic concept.

Checkpoints
- The didactic concepts of the programme are in line with the objectives and are instrumental in developing the programme, structuring the teaching and learning process and choosing the working methods.
- The didactic concepts are realized in the programme.
- The relationship between contact hours, self-study and other study activities is optimal.
- Guarantees are in place that the location, function and quality of the internship (if applicable) and the graduation project or any other final test of the student’s ability, which forms an integral part of the programme, are appropriate.

Assessment
In general the four individual Masters programs each appear to have appropriate structure and content and there was good balance been didactic course work and the research project, approximately divided into one third/two thirds of effort respectively. In general, the criteria and checkpoints for this Facet are being suitably meet. One exception to this being the current lack of an appropriate structure which has already been mentioned in Facet 9, since not all students appear to have been required to complete an independent research project. Once this has been corrected, the new MSc in Veterinary Science degree program should have the appropriate coordination of structure and content to be able to meet the objectives of the program.

One important caveat, however, is that despite the best of efforts and conceptual design some research projects just inherently do not work out to the level of publication and yet may be able to provide excellent training. Indeed, the degree of training sometimes might be even better than that obtained from some research projects even though brought to completion. Some elements of this issue need to be addressed by the definition of what is expected as a suitable “research endeavour”.

Rating(s) for Facet 10

<table>
<thead>
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Facet 11: Assessment and Examinations

Guidance provided by QANU Protocol

Criteria

The system of assessments and examination provides an effective indication whether the students have reached the learning targets of the course programme or its components.

Checkpoints

- The tests, evaluations and examinations provide an adequate check on attainment of the target qualifications of the programme.
- The tests, evaluations and examinations are in line with the content and learning objectives of the various parts of the programme.
- The programme provides individual students with adequate feedback concerning the extent to which the various learning objectives have been achieved.
- The programme ensures adequate consistency of the student assessments.
- The assessment is adequately organized (as regards e.g. announcement of the results, opportunities to resit tests or examinations, compensation arrangements etc.).
- The examination committee functions adequately and performs its statutory tasks.

Description

The testing/grading system (scoring range, pass levels, pass/fail)

Course Phase (6 months):

Most courses modules are scheduled during the first 5 months and have a duration between 1 – 6 weeks. At the end of each course module an assessment is made or testing takes place. This can be a written or oral test, a written or oral presentation or an assessment based on participation, knowledge of the subject and result of practical exercises. For all tests, scores range between grade 0 and grade 10. The pass level is grade 5.5. For all assessments scores used are: fail or pass. During their study period the students attend 10 seminars (conferences, symposia, workshops etc) in the veterinary focus areas (IVR). A list of seminars is made for each 6 month period and a record of attendance by the students is kept. As a minimum during the 12 month research period, students participate (at least every 2 weeks) in regular discussions of the research activities of the department concerned. The total amount of study points for the course and seminar component is 30 ECTS. Students cannot start with the research phase unless they have attended all courses that are given during the first 5 months, participated in the exam or assessment of these courses and have passed the exams or were assessed and graded at least 5,5 for these courses. All courses have to be graded as ‘passed’ before the research project is presented and master degree is obtained.

Research Phase (12 months):

In the Research Phase the students perform and are assessed for: (1) Preparation and presentation of the research proposal; (2) Conducting research, analyses of data and the quality of the manuscript, which should be in a format and of sufficient quality for publication in an international journal; (3) Presentation and defence of research project. Each of the components of the research phase is assessed with the scores: fail or pass. Step 1 has to be concluded with a ‘pass’ before a start can be made with step 2 (research). The research manuscript has to be assessed with a ‘pass’ before the research can be presented and defended (step 3). During the research phase the student has a direct supervisor and an advisor (who is not directly involved in the same subject). The supervisor meets regularly (weekly) with the student and follows a feedback system, whereby instructions are given and the result is assessed. Meetings with the advisor take place monthly and are intended to assess the progress in attaining the 11 end-qualifications. The supervisor and advisor jointly assess and grade every 3 months the level attained in the 11 end-qualifications. The scoring range of the assessment is: insufficient, sufficient, good, and excellent. In this way, the student knows where his/her weaknesses are and can discuss with the supervisor and advisors how to improve their skills in order to achieve the end-qualification before graduation.
Rules for students and teachers on grading and testing will be recorded before September 2008 in the “Education and Examination Regulations” (Dutch: Onderwijs- en ExamenReglement = OER) of the Master of Science in ‘Veterinary Science’ degree program. According to the Dutch law on “Higher Education and Research” (in Dutch: Wet op het Hoger Onderwijs = WHW), every Faculty member has to formalize such rules for their educational programs and set up an examination committee. The OER will be formulated and the examination committee will be in place 3 months before the start of the program. To guarantee quality and fairness Utrecht University has introduced a standard text for the OER, in which about 20% is tailored to the nature of the program concerned.

Registration, records and announcement:
Announcements in relation to examinations are made by the departments to the students concerned and are placed on a central announcement board at the Educational and Student affairs office / Office for International Cooperation OSZ/BIC. This office, which is part of the Faculty Office, has about 20 staff members and has extensive experience with record keeping, quality assurance and student counselling for veterinary students. OSZ/BIC is responsible for keeping the records for attending the seminars and elective courses. The central registration of results is the responsibility of OSZ/BIC and the university system (OSIRIS) is used for that purpose.

Assessment
As described above based on the addendum of the self-evaluation report, a detailed procedure for assessment has been set up and is under the authority of the education board. This process appears to be good for all the individual phases of the education process. There is still some uncertainty in relation to the extent that uniform criteria will be applied between the four currently separate programs within the overall Masters of Veterinary Science degree program. This uniformity clearly needs to be achieved, but the Evaluators are confident that Education Board will achieve this.

Rating(s) for Facet 11

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<tr>
<th>MSc in Veterinary Science</th>
<th>Adequate -- Will surely reach higher levels once program has been initiated</th>
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<tbody>
<tr>
<td>VEE</td>
<td>Good as current individual program, adequate as a part of the whole</td>
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<tr>
<td>AP</td>
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<tr>
<td>VA</td>
<td>Good as current individual program, adequate as a part of the whole</td>
</tr>
<tr>
<td>LAS</td>
<td>Good as current individual program, adequate as a part of the whole</td>
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**Topic 3: Deployment of staff (Facets 12,13,14)**

**Facet 12: Requirements for University**

**Guidance provided by QANU Protocol**

**Criterion**
Teaching is largely provided by researchers who contribute to the development of the subject area.

**Checkpoints**
- A major part of the education is provided and/or developed by teaching staff who are actively engaged in academic research of recognized quality.
- Right from the start, students come into contact with academic and/or professional role models in the field covered by the programme *).
- In distance learning this role-model function will in some way be incorporated in the programme material.
- Teaching staff and/or those responsible for developing the programme will establish adequate links with the professional field of practice for which the students are being trained.

**New degree courses**
The degree course meets the following criteria for the deployment of staff for a University of Professional Education (HBO) degree course or a University (WO) degree course: University of Professional Education (HBO):
- Teaching is largely provided by staff who relate the course programme to the professional practice University (WO):
- Teaching is largely provided by researchers who contribute to the development of the subject area

**Description**
The four Master programs each have a Program Director who has designed the program or taken responsibility for an existing course programme. The Program Directors are Professors with a PhD and have leading positions in educational and research programmes of the Faculty of Veterinary Medicine (FVM). The Program Directors of the MSc Animal Pathology and the MSc Veterinary Anaesthesiology also have the Diplomate status in their respective disciplines. Program Directors are responsible for the program content and its development. Program development is a continuous process based on developments in the scientific field, educational means, Faculty and University policy and organisation, quality assessments etc. For each program there is a Program Coordinator who is directly involved in the implementation of the teaching programme and the lecturing. The Program Director, Program Coordinator and a number of senior academic staff form the core of the teaching staff.

In addition, there are many other staff members of the Departments involved who contribute to teaching (such as occasional speakers and staff during regular working circumstances in the surgery rooms, PM room, laboratories, computer rooms, library) and supervision of research project. Students also participate in courses which are selected or offered to them in other departments, faculties or universities. Lecturers of these courses and those who contribute occasional and who are not specifically assigned to teaching of MSc students of the FVM master programme are considered as non-core staff.

**Assessment**
The individual efforts of the four current Program Directors are laudatory. Each is clearly very committed to the success of the program and approaches this responsibility with enthusiasm, vigour and rigorous academic standards. There is clearly a philosophy within the FVM from the Dean on down to Faculty staff involved in the programs which attributes the highest importance to a high standard of teaching. The FVM management is strongly committed towards these four programs (soon to be one). As part of the transition to a single degree program, an overall coordinator needs to be appointed who will ensure the full coordination between the four separate components and truly make this a “single integrated veterinary science degree program”. Individual sections are appropriate but this does not abrogate the responsibility for overall coordination and an overall set of standards for the combined (and then single) program. Given the ethos of the FVM there is every reasonable expectation that this will occur.
Rating(s) for Facet 12

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<th>Adequate (will probably improve, but will represent a significant challenge)</th>
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Facet 13: Quantity of Staff

Guidance provided by QANU Protocol

Criterion
The staff levels are sufficient to ensure that the course is provided to the required standards.

Checkpoints
- The available manpower is sufficient for the execution of all teaching and supervisory tasks.

New Degree Courses
- Sufficient capacity is made available to be able to start the new degree course
- Sufficient capacity is made available to be able to continue the new degree course

Description
A total of 31 academic staff are directly involved in the teaching and supervision of research projects of the 4 current MSc courses. The teaching staff have positions at the FVM as Professors (8), senior lecturers (15) and lecturers (8).

Number and position of core academic staff at FVM assigned to the programme

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<tr>
<th></th>
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<td><strong>10</strong></td>
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Course director/coordinators were asked to estimate the time staff spent on the MSc courses. Time allocated to the courses varies a lot between staff members. Certain staff members, such as the MSc course coordinators of VEE who spend a lot of their time on teaching and supervision (0.3 FTE), others only teach occasionally. Time spent has been summed up whereby 1 full time equivalent (FTE) represents 1640 hours. A total of 4.5 FTE or 7,400 hours of staff time is estimated to be spent on the MSc per year. Staff at the PhD level spent most time (2.1 FTE, followed by staff with Diplomate status and PhD degree (1.5 FTE).

The total average number of MSc students in the four courses was 15.6; bringing the ratio of academic staff time per student to 0.29 FTE (variation 0.14 – 0.45). Allocation of academic and administrative staff time per MSc student is estimated to be on average 0.3 FTE or 475 hours per year; for the duration of the course period this is 713 hours for the courses of 18 months and 950 hours for the course of 24 months.

Assessment
The evaluation committee believes that sufficient academic staff is allocated to the four current programmes given the current number of students. VA, however, with a total of four academic staff who are equally divided between small and large animal anaesthesiology (2 plus 2), is in a precariously fragile situation and one academic staff departure or prolonged illness could cause catastrophic problems and leave a student in a precariously unfair and very inappropriate situation. This low number also impedes the number of students who can be accepted into the program. Having only one student in a program is less than desirable, and may place that student at a disadvantage as they will not benefit from interaction with other students. The degree program as a whole will be affected by weaknesses in this area, despite this course only representing a small part of student intake.
Rating(s) for Facet 13

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Facet 14: Quality of Staff

Guidance provided by QANU Protocol

Criterion
The staff is sufficiently qualified to ensure that the aims regarding contents, didactics and organization of the course programme are achieved.

Checkpoints
- The teaching quality of the staff is sufficient to ensure execution of the degree programme and realization of the underlying teaching philosophy.
- The range of specialisation available in the teaching team is wide enough to support the programme objectives and the target qualifications.
- The human resources and internal training policy monitors and promotes the teaching quality and performance of the individual members of the teaching staff.

New Degree Courses
- The staff that is to be deployed is sufficiently qualified to ensure that the aims regards contents, didactics and organization of the course programme are achieved

Description
The Faculty’s educational qualification policy conforms to the policy of Utrecht University with a specific focus on educational qualities for appointment and the implementation of Basic Qualification in Education (BQE). The intention is that academic staff who are not full Professors will complete the BQE. The qualification progression is characterized by trained learning during work.

Assessment
In evaluation committee’s assessment, the teaching staff is clearly excellent in quality and more than capable of ensuring a very favourable execution of the degree program and fulfilment of the underlying teaching philosophy. The range of specialities represented by the staff is broad and certainly ample to support the programme objectives and the target qualifications. The human resources and internal training policy monitors and promotes the teaching quality and performance of the individual members of the teaching staff. The substantial amount of time the teachers spend with the students and the attention they pay to them indicates a high commitment towards the students, and is clearly appreciated by students.

Rating(s) for Facet 14

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**Topic 4: Facilities and provisions (Facets 15 and 16)**

**Facet 15: Material Facilities**

**Guidance provided by QANU Protocol**

**Criterion**
The accommodation and material facilities are sufficient to implement the programme.

**Checkpoints**
- The available educational facilities are adequate for execution of the programme, and permit implementation of the working methods chosen.
- ICT facilities are adequate and sufficiently accessible.

**New Degree Courses**
The intended accommodation and material facilities are sufficient to implement the programme.

**Description**
The facilities of the Faculty of Veterinary Medicine are located in the Uithof, the campus area of Utrecht University. The clinics, offices, research facilities, experimental farm and the animal hospital (largest surface) are all situated along the Yalelaan. The buildings of the FVM are being completely renovated. Renovation work started in 2004 and will continue until mid 2009. Students can work in laboratories that are provided with modern equipment and tools to perform their research. Besides the various laboratories the animal hospital gives students a unique opportunity to handle animals and become acquainted with the latest technologies.

Information resources are now offered to students, teachers and researchers in an integrated Learning Environment (in Dutch: Studielandschap). Physically, the major part of the Learning Environment is located in the Androclus building, comprising of the 300 m² Schubärt gallery (containing appr. 250 specimen) and a 2000 m² two storey space with other learning equipment and facilities (>160 pc-workstations), including the ‘traditional’ library). Additionally, four smaller Learning Environments are found in the clinics’ for Companion Animals and for Horses, consisting of a specialised library plus 10-20 pc-workstations for information retrieval and self study purposes. All Learning Environments offer printing facilities and internet access as well as intranet connections.

The Learning Environment in the Androclus building offers learning resources to students such as text-and reference books, digital photographs (including X-rays), pictures, schemes and videos, plastinated specimen, dissections, conserved organs and parts of animals (either for handling or observation only). The second floor of the Learning Environment in the Androclus building is housing the more specialised library, i.e. the most current part of the physical collection of specialised veterinary books and journals. It comprises ca. 10,000 books (monographs, dissertations, book series, proceedings), the current year editions of > 200 journals which are not available in electronic format, as well as ca. 13,000 volumes of bound printed journals from 1992 onwards. In addition to these, all users have access to the complete electronic collection of the University Library of Utrecht. This includes > 9,000 peer reviewed journals (ca. 300 titles in the field of veterinary medicine or animal production, as well as > 3000 related/biomedical titles), hundreds of electronic books, proceedings, newsletters etc., and ca. 80 specialised databases (including CAB-Abstracts, Agricola etc.).

**Assessment**
The facilities of FVM would be the envy of any veterinary school in the world. The facilities that are available for the MSc students are modern and well equipped for teaching and research. Students spend a lot of time in the laboratories and clinics. They receive excellent library and IT support. Suitable individual office desk space is provided to each student.
### Rating(s) for Facet 15

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Excellent</th>
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<tbody>
<tr>
<td>VEE</td>
<td>Excellent</td>
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<tr>
<td>AP</td>
<td>Excellent</td>
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<tr>
<td>VA</td>
<td>Excellent</td>
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<tr>
<td>LAS</td>
<td>Excellent</td>
</tr>
</tbody>
</table>
Facet 16: Student Support and Guidance

Guidance provided by QANU Protocol

Criteria
The student support and guidance, as well as the information given to students are adequate for the purpose of students’ progress. The student support and guidance, as well as the information given to students meet the requirements of the students.

Checkpoints
- The student progress registration system is effective and informative; students receive timely information about the progress they are making in their studies.
- Tutors pay sufficient attention to the progress students are making in their studies.
- The first year of a bachelor’s degree programme has the necessary selective and directive effect; students are provided with (binding) advice about the further course of their studies at the end of this year.
- The tutoring, counselling and information supply services meet students’ needs.

New degree Courses
There is sufficient staff capacity to provide student support and guidance as well as information to students, and these provisions are adequate for the purpose of students’ progress.

Description
Because the students’ projects are embedded into the research programmes of the Departments, it ensures from the start close contact with the research scientist and other lab members including PhD students or technicians. Students are supervised by at least one of the senior staff members from the group of core lecturers of the Departments. Supervisors have regular meetings with their students and follow up the progress of the research project (including, data-collection, writing of paper). Students are also involved in social activities such as day trips with Faculty staff.

All students can turn for advice to the Office for International Cooperation (BIC) of the Faculty of Veterinary Medicine. BIC is responsible for the development and execution of the Faculty policy for international cooperation. Besides the organisation of the student exchange and the international postgraduate education programme, BIC also assists international students with the necessary arrangements (visa, residence permit, housing facilities) and provides social counselling. The International Neighbour Group of the Utrecht University organises monthly excursions and social events for the international guests and students of the University.

Assessment
The evaluation committee is confident in the high standard of the support BIC has provided and will continue to provide in the future. Not only do they guide the students whenever they experience difficulties in their studies, they also arrange all practical formalities for the students before they embark upon their studies in Utrecht. BIC is extremely effective in the recruitment of students from around the world into the program and has a fabulous set of global contacts. This office is also a major support of students as they enter the programme and throughout the programme.

Excellent student support is also provided by academic staff and they are highly committed. The ratio of academic staff to students is ideal for this type of educational programme. Students have frequent day-to-day contacts with other students and academic staff, and clearly benefit from the supportive environment created in each of the Departments.

Rating(s) for Facet 16

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
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<tbody>
<tr>
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</table>
Facet 17: Evaluation of Results

Guidance provided by QANU Protocol

Criterion
The degree course is subject to a periodic review, which is partly based on verifiable targets.

Checkpoints
- The staff responsible for the program monitor the educational process and changes in the educational environment periodically.
- This monitoring of the educational process makes use of criteria permitting a check on whether the intended results are achieved.

New Degree Courses
Systematic approach - A system of internal quality assurance is in place, which uses verifiable targets and periodical reviews to take measures for improvement.

Description
Each course in each of the current four MSc programs is evaluated. The following approach is in use for the degree program veterinary medicine of the FVM and is already largely used for the master program VEE. From September 2008 it will be implemented for the degree program Veterinary Science as a whole. Immediately after finishing their tests, students fill out a questionnaire covering topics such as: What is your overall opinion of the course? Are there too many overlaps with other courses? Are the internet/audio-visual aids of good quality? What is your overall opinion of the different teaching formats used (lectures, working groups, group assignments, and labs)? What is the quality of the study materials that are being used? Do you have suggestions for course improvements? All courses with an evaluation below a medium quality are discussed at a meeting of the course’s main teachers and a student delegation. A report of this meeting and improvements is presented to the Board of Studies. Only courses that have had no severe complaints for several years are excluded from this meeting with students.

A research project forms a major part of the MSc study of all MSc students. The research is part of and linked to one of the research programs of the Faculty of Veterinary Medicine (Annex 3). As part of the evaluation of each faculty member these research programs are internally evaluated at a yearly interval and every six years there is an external evaluation. The last evaluation in 2006, graded the research output of the Faculty amongst the world top-5 veterinary research institutes. The quality of the MSc research project is intended to be at an internationally publishable level and is judged from the MSc research project manuscript and during an oral defence. The manuscript is the basis for (a) scientific publication(s) in (an) international refereed journal(s).

Assessment
The four individual programs are clearly going in the right direction with a high level of expertise, high standards, and both a solid individual and a joint commitment to excellence. The evaluation committee feels that due to the close contact between teacher and student the targets of the programs are reached. Each of the four current MSc degrees programs is being monitored individually and changes in the educational programs are occurring periodically. Some general criteria are being applied to make improvements. To date, comparison between the four MSc programs has not been an objective because each was a unique entity. As the new combined Master degree program becomes implemented there is a need to better standardize the evaluation processes between what will become parts of the overall program. Criteria for attainment of quality will need to be better defined, verifiable targets more specifically defined, and a more periodic evaluation that these targets are being attained needs to be done. The structure for doing this is clearly emerging especially with the creation and empowerment of the Board of Studies for the Postgraduate Masters Program in Veterinary Sciences. The FVM already has in place highly knowledgeable and expert academic staff in health sciences education and a
commitment to quality. Within such an environment the continued growth of the quality of the Masters Program in Veterinary Sciences appears inevitable.

**Rating(s) for Facet 17**

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Adequate - Will surely reach higher levels once program has been initiated</th>
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<td>VEE</td>
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<td>AP</td>
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<td>VA</td>
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<td>LAS</td>
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</table>
Facet 18: Measures to Effect Improvement

Guidance provided by QANU Protocol

Criterion
The results of this evaluation form the basis for measures that can be demonstrated to improve the course and that will contribute to reaching the targets.

Checkpoint
- The results of the monitoring process lead to actual modifications in the educational system.
- Improvements really are introduced when the intended results are not achieved.

Assessment
For the purposes of a new program such as the Masters in Veterinary Sciences the issues of Facet 18 are covered in the discussion on Facet 17 above.
Facet 19: Involvement of Staff, Students, Alumni and the Professional Field

**Guidance provided by QANU Protocol**

**Criterion**
Staff, students and the professional field in which graduates of the course are to be employed are actively involved in the internal quality assurance.

**Checkpoints**
- The relevant stakeholders (university staff, students, alumni and professionals in the field fed by the programme) are involved in the monitoring of the education process and the modification of the education environment.
- The programme committee performs its (statutory) tasks adequately.

**New Degree Courses**
Staff, students, alumni and the professional field in which graduates of the course are to be employed will be actively involved in the internal quality assurance.

**Description**

**Involvement of alumni**

Alumni of the four master programs are limited in number (134) and are spread out all over the world. The department OSZ-BIC maintains an alumni register. Regularly (at least twice a year) alumni who have graduated during the last 5 years will be approached with a questionnaire asking about their career development and progress in research (publications, PhD), in addition for their comments on the content of Masters program in relation to their job performance. Results of questionnaires will be summarized and presented to the Board of Studies once a year. Subsequently the Board can request the course directors to adjust and improve the curriculum.

**Involvement of professional field**

Feedback from the professional field will be sought through:
- Contacts at UU level with educational experts and other master programme organisers (member of Board of Education, teachers and OSZ-BIC).
- Contacts with the management of partner institutions of FVM (eg London, Antwerp, Gent, Pretoria, Davis) (by course directors and teachers).
- Contacts with the management of institutions from where the master students were sent to FVM (by OSZ-BIC).
- Guest lectures and speakers will be asked about their opinion about the programme and the students.

**Assessment**

Apart from a survey in 2007 amongst all the alumni, the assessment part of this program is still in its infancy. Little evaluation beyond the boundaries of the University appears to have occurred with the existing four programs, although the survey in 2007 gave rise to many positive answers and indications that about 60% of the alumni proceed with PhD training. The FVM is in the very early stage of initiating such evaluation for the new program. For the new program nothing realistically can be accomplished until at least 2010 when the first class has graduated thus leaving the school plenty of time to initiate this level of evaluation. The faculty has stated the intent of having a broad scope of evaluation available.
**Rating(s) for Facet 19**

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Too early for any judgement of the new program to be possible, but the evaluators believe that on implementation of the above approach it will at least be rated as Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>VEE</td>
<td>Good (aided by a larger number of alumni and therefore stakeholders)</td>
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<tr>
<td>AP</td>
<td>Adequate</td>
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<tr>
<td>VA</td>
<td>Adequate</td>
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<tr>
<td>LAS</td>
<td>Adequate</td>
</tr>
</tbody>
</table>
Topic 6: Results (Facets 20 and 21)

Facet 20: Level that has been achieved

Guidance provided by QANU Protocol

Criterion
The final qualifications that have been achieved correspond to the targets set for the final qualifications in level, orientation and domain-specific requirements.

Checkpoints
- The final qualifications achieved by the graduates are in line with the target qualifications of the programme.
- The content and level of the graduation projects are in line with degree (bachelor’s or master’s) awarded.
- Graduates are able to operate adequately in the field for which they have been trained.

Description
The overall graduation rate from the 1st intake (students graduated in 1996) to the last group who started in 2004 and presented their MSc thesis in 2006 was: 94%. In 2007, a questionnaire was sent to alumni of the four MSc courses. For 104 of the 134 alumni, a contact e-mail address was available and the questionnaire was sent to them. An analysis of the responses revealed that the MSc course has improved the career possibilities of the majority of the alumni. 42% (21/50) of the alumni found a better job with a new employer and 22% (11/50) got a better job within the same institute. Considering the financial obstacles to obtaining funding or scholarships for PhD study, the academic development of the alumni is remarkably good as 60% (30/50) of them completed a PhD study or were doing a PhD study in 2007. This includes PhD studies in the Netherlands, UK, home country or home region. Another 22% was planning to study for a PhD. Forty eight (24/50) published one or more articles in international journals, including the article(s) from the MSc study and 12 were preparing a publication. Those who had a publication in preparation were mainly recent MSc graduates.

Assessment
The evaluation committee feels that the structure of the current and proposed Master program(s) does and will provide students with an excellent opportunity for reaching a good and desirable level of achievement. Students with a Master degree have frequently continued further studies in form of residencies or PhD programs attesting to the success of the Master educational program. Many other graduates returned to their home country and aimed for a position well representing the qualifications of the program. Certainly, the final qualifications that are being achieved correspond to the defined targets with respect to level, orientation and domain-specific requirements. A high graduation rate is achieved and the graduates are readily able to continue successfully either in further education or in a position most often in their home country. This clearly represents a successful outcome for the existing programs. Can the program do better - yes of course - but its current level of achievement is already very high.

Rating(s) for Facet 20

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Currently adequate – but will definitely reach high levels once program has been initiated</th>
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</thead>
<tbody>
<tr>
<td>VEE</td>
<td>Excellent</td>
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<td>AP</td>
<td>Excellent</td>
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<td>VA</td>
<td>Excellent</td>
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<td>LAS</td>
<td>Excellent</td>
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</table>
Facet 21: Results of Teaching

Guidance provided by QANU Protocol

Criterion
To measure the results of teaching, target figures have been set in comparison with relevant other degree courses. The results of teaching meet these targets.

Checkpoints
- The department responsible for the programme has set targets for the student success rate (= number of graduates per year) and the duration of studies comparable with those for other relevant programmes.
- The actual student success rate is in line with these targets.

Description
Current success rate in terms of successful graduation is 94%, within the time set for the program and the graduates are readily able to move to their next level of career.

Assessment
A very high success rate target has been set for these programs and it is being clearly achieved.

Rating(s) for Facet 21

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
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</tr>
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<td>VA</td>
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<td>LAS</td>
<td>Excellent</td>
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</tbody>
</table>
Facet 22: New Degree Courses

Conditions for Continuity (Note no equivalent in QANU PROTOCOL)

Facets Criteria

Part One: Graduation guarantee - The institute guarantees its students that the course programme can be fully completed

Part Two: Investments - The intended investments are sufficient to affect the degree course (including facilities and provisions)

Part Three: Financial provisions - The financial provisions for the negative results that have been calculated are sufficient to cover the start-up losses

Assessment
A letter from the Dean of the institute in which he satisfactorily addresses all three issues is attached in Annex 3.

Rating(s)

<table>
<thead>
<tr>
<th>MSc in Veterinary Science</th>
<th>Excellent</th>
</tr>
</thead>
</table>

37
9. Overall Conclusions

The Faculty of Veterinary Medicine of the University of Utrecht is a quality academic organization and one of the leading veterinary schools in the world that as evaluators we would place within the top five in the world. As such, it is without doubt a leader in veterinary education. The school has a wealth of educational expertise, its administration and faculty are dedicated towards veterinary education and exceptional knowledgeable of what is and what creates a high quality learning environment. The faculty responsible for the Master of Science in 'Veterinary Science' degree program share these qualities. The conversion of the four current MSc programs into a single Master of Science in 'Veterinary Science' is timely and the coordinated program will be of benefit to each of the current individual programs. At this point, with the new Master degree program not due to start until September 2008, not all of the administrative structures are in place, but are beginning to emerge and the evaluators are confident that all phases will be appropriately put in place in a timely manner over the next 9 months.

This evaluation has been written from two perspectives. The first purpose was to provide the governing bodies an independent assessment of the program. The second was to become an important adduct for providing some suggestions to the teaching faculty and FVM administration on some areas of the program structure where potentially helpful changes might be made. As noted, some of the ratings for the combined program were only at the adequate level BUT this is as should be expected for a program that is in development and higher ratings will clearly be deserved as the corresponding development has been completed. This program is the creation and contribution of a good and highly competent faculty and is of tremendous service to the students who currently and will attend. Very specifically it provides these students with the critical next step in their career development and provides a solid foundation for them to enter a residency or PhD program or to return to their country of origin into a critical professional capacity.

The evaluators support with very considerable enthusiasm the full accreditation and implementation of this proposed Master of Science in 'Veterinary Science' degree program. We are confident it will be a quality program of the highest international standard. It clearly will make a major contribution to an underserved need in international education. The faculty have already exhibited all of the attributes and desires that will make this a quality experience for students. There is a critical worldwide need for this program to continue to expand and serve both a broader complement of students and further areas of veterinary education.

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Appendix 1:

Brief Curriculum Vitae – Professor Dirk U. Pfeiffer

Degrees
1984  Degree in veterinary medicine, Justus Liebig University, Giessen, Germany
1986  Doctor medicinae veterinariae (magna cum laude), Justus Liebig University, Giessen, Germany

Postgraduate diploma in Tropical Veterinary Medicine, Free University of Berlin, Berlin, Germany, 1987. Membership of
the Australian College of Veterinary Scientists in Epidemiology, 1992 (by examination). PhD in Veterinary Epidemiology,
Massey University, Palmerston North, New Zealand, 1994; Diplomate of European College for Veterinary Public Health,
2003.

Current and previous posts
2000 - Honorary Professorship at London School of Hygiene & Tropical Medicine, University of London, United
Kingdom
1999 -  Professor of Veterinary Epidemiology, Royal Veterinary College, University of London, London, United
Kingdom.
1996 – 1999 Senior Lecturer in Veterinary Epidemiology, Institute of Veterinary, Animal and Biomedical Sciences,
Massey University, Palmerston North, New Zealand.
1992 - 1995 Lecturer in Production Medicine and Epidemiology, Department of Veterinary Clinical Sciences, Massey
University, Palmerston North, New Zealand.
1992 – 1994 National Health adviser to Pig Improvement Company NZ Ltd.
1985 – 1986 Field veterinarian with Instituto Colombiano Agropecuario and German Agency for Technical Cooperation,
located in the north of Colombia in a dual purpose dairy-beef production system.

Other appointments and awards
2003 -  Scientific Panel for Animal Health and Welfare of European Food Safety Authority
2005 -  International Advisory Standing Committee of Australian Biosecurity Cooperative Research Centre
2005 -  Wellcome Trust’s funding committee ‘Tropical and Clinical Immunology and Infectious Disease’
2005 -  Editorial Board of the international scientific journal BMC Veterinary Research
2002 -  Editorial Board of the international scientific journal The Veterinary Journal
2002 -  International Advisory Committee for Review of Food Safety and Biosecurity Programmes of Singapore’s
Agri-food and Veterinary Authority

Teaching Experience
Epidemiology teaching at undergraduate and postgraduate levels, including teaching of specialist courses at advanced level.
Directed Master of Veterinary Studies (Epidemiology) at Massey University, Palmerston North, New Zealand from 1995-99. 
Currently Course Director of MSc Veterinary Epidemiology and MSc Veterinary Epidemiology & Public Health by Distance
Learning.
Currently supervising and co-supervising 7 PhD and 20 MSc students.

Designed and taught international training courses in veterinary epidemiology and in spatial analysis in Austria, Australia,
Canada, Croatia, Denmark, Ethiopia, Germany, New Zealand, Malawi, Singapore, Sweden, Switzerland, Thailand, Hong
Kong and United Kingdom.

Publications
116 published peer-reviewed journal papers. 7 refereed book chapters. 16 official reports. Editor of 2 conference proceedings.
122 papers, 13 abstracts and 12 posters published in conference proceedings. 11 unpublished conference papers. 38 invited
guest lectures and plenary papers. 22 radio interviews, newspaper articles and television reports.

Research Funding
Current as principal investigator: approximately £2.2Mill for research programme on African swine fever virus and £800k for
research on a vaccine and epidemiology of PPR, both funded by the Wellcome Trust; £600k for animal welfare research from
BBSRC; £300k from Defra for research on farm-level disease biosecurity; £170k for research on rehoming success of dogs
from the Dog’s Trust; £150k from Defra for investigating the epidemiology of MRSA in dogs and cats; plus another £100k
for various smaller research projects.
Past funding: approximately £1,500,000 research funding for various projects, including use of biomarkers to predict horse
fractures, antibiotic usage in pig production, development of a global animal and production atlas, development of predictive
spatial risk models for rift-valley fever in Africa, control of tick-borne diseases in redline zone of Kruger National Park, role
of wildlife in the epidemiology of paratuberculosis, spatial patterns of avian influenza in China, tuberculosis in wild possums
in New Zealand.
Brief Curriculum Vitae - Professor Donal Walsh

Contact Information
Tel: (530) 752 3399
E-mail: dawalsh@ucdavis.edu

Education
B.Sc in Mathematics, Physics & Chemistry, University of London, 1961
M.Sc. in Physical Chemistry, University of London, 1961
Ph.D. in Physiological Chemistry, University of Wisconsin, 1966
Postdoctoral Fellow in Biochemistry, University of Washington, 1966-68

Professional Experience
Assistant Professor (1968-73), Associate Professor (1973-78), Professor (1978-00) of Biological Chemistry, School of Medicine, University of California, Davis; 
Associate Dean for Curricular Affairs and Director, Office of Curricular Support, School of Medicine, University of California, Davis (1983-98); (with responsibility for implementation of MD curriculum); 
Chair, Depart Biological Chemistry, University of California, Davis (1976-80); 
Professor of Medicine and Epidemiology, School of Veterinary Medicine, University of California, Davis (2000-present)

Scholarly Activities
Postdoctoral Fellow of the American Cancer Society, 1966-68; 
Established Investigator of the American Heart Association, 1970-75; 
Physiological Chemistry Study Section, American Heart Association, 1975-78; 
Editorial Board, The Archives of Biochemistry and Biophysics,1977-82; 
Physiological Chemistry Study Section, National Institutes of Health, 1977-81; 
Association of American Medical Colleges, Group on Education, 1984-98; 
Editorial Board, Biochemical Journal, 1981-91; 
AAMC Medical Schools Objectives Project, 1996-99; 
Editor, Journal of Veterinary Medical Education, 2000-07

Selection of Publications (from 151)
Walsh, D. A., Perkins, J. P. and Krebs, E. G., An Adenosine 3', 5'-Monophosphate-Dependent Protein Kinase from Rabbit Skeletal Muscle.  J. Biol. Chem. 243, 3763-3765 1968  (ISI "The 1000 Contemporary Scientists Most-Cited); 
Chang-Shung Tung, Donal A. Walsh, and Jill Trewella A Structural Model of the Catalytic Subunit-Regulatory Subunit Dimeric Complex of the cAMP-dependent Protein Kinase A Andromeda Perspective and Core. Biophys J 75 3331-3339, 1998; 
Walsh DA, Osburn,Bl, and Schumacher, RL. Defining the Attributes Expected of Graduating Veterinary Medical Students; Part II: External Evaluation and Outcomes Assessment J. Vet Med Educ 29 36-42 2001; 
**Appendix 2:**

Site Visit Schedule

<table>
<thead>
<tr>
<th>Schedule for the Site Visit of a Team of the EAEVE to the Faculty of Veterinary Medicine, Utrecht University</th>
</tr>
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<tr>
<td><strong>4-7 November, 2007</strong></td>
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</table>

**Purpose:** Evaluation of the postgraduate master program Veterinary Science

**Members of the team:**

Prof. Dr. Dirk Pfeiffer (RVC, London) and Prof. Dr. Donal Walsh (SVM, UC Davis)

<table>
<thead>
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<th>Day 1, Sunday 4 November, 2007</th>
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### Day 4, Wednesday 7 November, 2007

<table>
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<tr>
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<tbody>
<tr>
<td>08.00</td>
<td>Team collected from hotel</td>
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</tr>
<tr>
<td>08.30 – 10.15</td>
<td>Working in the team room</td>
<td>Yalelaan 1 Room 110</td>
</tr>
<tr>
<td>10.15 – 11.15</td>
<td>Meet with Prof. Ludo Hellebrekers (Course Director) and Dr. Paul van Dijk of the MSc Veterinary Anaesthesiology, and <em>alumna</em> Lilia Goyenechea</td>
<td>Yalelaan 114 room 158</td>
</tr>
<tr>
<td>11.15 – 12.15</td>
<td>Visit clinical facilities of Companion Animal and Equine departments</td>
<td>Yalelaan 114</td>
</tr>
<tr>
<td>12.30 – 13.45</td>
<td>Lunch with Prof. Peter van Beukelen (chair, Quality Improvement Veterinary Education), Prof. Freek van Sluijs (Director of Academic School), Drs. Jan Haarhuis (Head, Educational and Student Affairs) and Drs. Hellen van der Maazen (BIC)</td>
<td>Restaurant Androclus building</td>
</tr>
<tr>
<td>14.00 – 16.00</td>
<td>Meetings or visits on request or working in team room</td>
<td>Yalelaan 1 Room 110</td>
</tr>
<tr>
<td>16.00 – 16.30</td>
<td>Exit interview with Prof. Albert Cornelissen, Prof. Freek van Sluijs, Dr. Robert Paling</td>
<td>Dean’s office</td>
</tr>
<tr>
<td>17.00 – 18.30</td>
<td>Reception for site visit team and all staff and students who participated in the programme</td>
<td>Yalelaan 1 In front of lecture halls C101-C102</td>
</tr>
<tr>
<td>19.00</td>
<td>Dinner</td>
<td>Hotel</td>
</tr>
</tbody>
</table>

**Site visit team accommodation:**
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**Office for site visit team:**
Yalelaan 1, OSZ – BIC, Room 110  
Tel: +31 30 253 9751
Appendix 3:

Letter from Dean

Universiteit Utrecht
Faculty of Veterinary Medicine
Dean

Date
January 15, 2008

Subject
declaration

Declaration

On 1st September, 2008 the Faculty of Veterinary Medicine of Utrecht University started the postgraduate Master of Science educational programme "Veterinary Science". This educational programme encompasses the following four already existing master programmes:

- Veterinary Epidemiology and Economics
- Veterinary and Molecular Pathology
- Veterinary Anaesthesiology
- Laboratory Animal Science

In view of the accreditation of the Master of Science educational programme Veterinary Science, which will be requested from the NVVQ, the undersigned, Prof. Dr. A.W.C.A. Comelissen, Dean of the Faculty of Veterinary Medicine of Utrecht University declares that the following conditions for conformity are guaranteed:

Part One: Graduation guarantee

The institute guarantees its students that the course programme can be fully completed.

Part Two: Investments

The intended investments are sufficient to offer the degree course (including facilities and provisions).

Part Three: Financial provisions

The financial provisions for the negative results that have been calculated are sufficient to cover the starting losses.

Prof. Dr. A.W.C.A. Comelissen