

School of Veterinary Medicine

Assessment Summary

2007-2008

1. “Has your school/college assessment plan been updated in the past year?”

The overall assessment plan in the School of Veterinary Medicine (SVM) remains structured on a blend of activities to meet the requirements of our national accreditation program for the Doctor of Veterinary Medicine (DVM) degree program from the American Veterinary Medical Association (AVMA) Council on Education (COE), and data desired internally for programmatic review and revision. AVMA COE reaccreditation occurs on a seven year cycle. Our School’s accreditation is due for review this year; the required self-study document is in preparation and the accreditation site visit is scheduled for December 2008.

During the 2007-2008 academic year, we expanded our curriculum assessment/outcomes assessment activities in several areas. The expanded activities have been initiated to meet enhanced requirements by the AVMA COE, and as part of a comprehensive two-year long DVM curriculum review launched during the spring semester 2008. New activities include:

- creation of a formal system for outcomes assessment data sharing on a yearly basis between departments, administration and the school’s Curriculum Committee (launched during spring 2008);
- development of a new curriculum assessment survey tool completed by second year DVM students (launched as a paper survey spring 2007 and converted to a web-based survey spring 2008);
- development of a program for clinical competencies assessment of every fourth year DVM student (launched May 2008);
- development of systems for intra-departmental peer review of courses every three years (being launched during summer 2008);
- development of a system for regular, repeated curriculum assessment by alumni (yearly, one- and three-years post-graduation) and employers of our alumni (every three years) (being launched July 2008).

2. “Describe any assessment activities conducted in the school/college for unit-wide programmatic or curricular review.”

DVM Degree Program Assessment

The DVM degree program is a major focus of unit-wide assessment in the SVM. A variety of assessment methods are used to continually re-evaluate and improve our DVM program. These methods, the data generated from these assessments, and examples of curricular change driven from the analysis of these data are outlined in the information presented below, as extracted from our yearly interim reaccreditation report submitted to the AVMA COE in December, 2007.

Student outcomes

Exit survey

We collect information from graduating fourth year students via an exit survey administered immediately prior to graduation. Data from the Class of 2008 exit survey are pending at the time of this writing, but information is provided herein for the Class of 2007.

The survey probed student satisfaction with 44 aspects of their DVM program experience, on a scale of 1 (strongly disagree) to 5 (strongly agree), including (but not limited to) assessments of overall quality of institutional resources, instruction, hands-on learning opportunities, educational preparation in specific academic areas, student services, career preparation, NAVLE (national licensing board exam) preparation (this is also surveyed in a separate process), problem-solving, communication skills, ethical decision making, promotion of life-long learning, leadership development, etc. The students were also asked to respond to 11 open-ended questions to assess specific strengths and weaknesses of the program.

We achieved a 95.2% survey return rate among our 2007 graduates. Mean responses to the 44 objective questions ranged from a low of 1.99 to a high of 4.05. The overall mean response value across all 44 of the objective ranking questions was = 3.56. Responses to specific comprehensive evaluation questions included 77% strong agreement or agreement that the DVM program provides high quality classroom instruction, 79% strong agreement or agreement that the DVM program provides high quality clinical instruction, and 74% strong agreement or agreement that respondents would highly recommend this DVM program to others. Among the 44 objective questions, only the following received mean response values of < 3, a level reflecting a fundamentally negative response.

- #13 – “The DVM program provided adequate instruction and educational opportunities to allow students to develop an understanding of – business finances and practice management” (1.99)
- #14 - “The DVM program provided adequate instruction and educational opportunities to allow students to develop an understanding of – personal finances management” (2.05)

- #22 - “The DVM program provided adequate instruction and educational opportunities to allow students to develop an understanding of – how to seek and negotiate employment” (2.50)
- #24 - “The DVM program provided adequate instruction and educational opportunities to allow students to develop an understanding of – emergency and intensive care case management” (2.66)
- #33 – “Regarding the DVM program in general - the program provided an adequate level of hands-on learning experiences in years 1-3 of the curriculum” (2.68)

In response to these evaluations, we have expanded our emergency and critical care electives and are re-evaluating our current third year professional skills course to better address the business and finance areas noted above. Finally, our on-going overall curriculum review will address the issue of hands-on learning in both the pre-clinical and clinical years of the curriculum.

Post-NAVLE survey

In addition to the end-of-the-year exit surveys, our fourth year students are also surveyed 4-6 weeks after their completion of the NAVLE exam. Data from the Class of 2008 survey is currently being analyzed, but information is provided herein for the Class of 2007. Although the response rate to this survey is typically low (36% for the class of 2007), it is noteworthy that 82% of respondents in the Class of 2007 indicated that their veterinary medical education adequately prepared them for the exam.

Post-second year survey

As a new mode of outcomes assessment data collection this year, second year students were asked to comment on admissions prerequisite courses and their DVM program courses and learning experiences in years one and two of the DVM curriculum. This began as a student-developed, ad-hoc survey with an approximately 50% response rate in spring 2007. As of spring 2008, the survey was converted to a web-based format and internalized as a formal mode of assessment through the Office of Academic Affairs, with a response rate of approximately 64%. In both years of the survey, the vast majority of respondents felt that the admissions prerequisites were appropriate. Suggestions for additional admissions prerequisites will be addressed by the DVM Admissions Committee. The areas of perceived deficits within years 1 and 2 of the curriculum will be addressed within the ongoing comprehensive curriculum review.

Assessments of alumni at some post-graduation point

Formal assessments of alumni were not conducted during 2007-2008. However, alumni were surveyed in 2001 and 2004, and our Associate Dean for Academic Affairs has secured a grant from the UW-Madison Provost’s Office and Campus Assessment Program to fund development and implementation (in July 2008) of a web-based survey of graduates one and three years post-graduation, as well as the employers of these graduates. (“Development and implementation of web-based surveys for outcomes assessment of veterinary medical graduate alumni and employers;” \$19,459) The intention is to utilize this survey system yearly from henceforth to regularly and systematically collect outcomes assessment data from these stakeholders.

Assessments of employers of graduates to determine satisfaction with the graduates

For the class of 2007, 43.9% of graduates reported accepting employment in Wisconsin. This is consistent with past years in which about half of UW-Madison SVM grads remain in Wisconsin, and we routinely seek and receive informal feedback from their employer veterinarians. Formal assessments from employers of our graduates were not solicited in the past year. However, as discussed above under “Assessment of alumni...” web-based surveys of employers of our alumni will be implemented yearly beginning in July 2008.

Assessments of faculty (and other instructors, for example interns and residents) related to such subjects as adequacy of clinical resources, facilities and equipment, library and information resources, etc.

Faculty and staff input is solicited at a number of times and at multiple levels throughout the year, including within the department, the VMTH, the SVM, and campus. For example, the UW-Madison annually issues a request for proposals for teaching laboratory modernization funds. The SVM Office of Academic Affairs follows that notice by gathering input from faculty and staff regarding the priority needs of the SVM that should form the basis of a proposal to this campus program. Similarly, departments consult with their faculty and staff regarding priorities for equipment or other needs that might become a target for department budget support or for the use of indirect cost returns, whether at the departmental level or as an “off the top” item for the SVM.

At the level of the SVM, several faculty committees, e.g., Research Committee, Shared Resources Committee, may in the course of their activities identify needs and work to make changes when the need is identified. In the same manner, the departments provide feedback through their review structures to request changes that they feel are needed.

VMTH administrators use input from clinical faculty to develop a “wish list” of equipment items to be considered for direct VMTH purchase or for inclusion as priority targets identified in our regular communications newsletter, “On Call,” that is sent to donors and friends of the SVM.

Beyond the SVM, the campus library system solicits input from faculty regarding journal acquisitions or deletions, and Steenbock (agricultural library) includes an SVM faculty member on their advisory committee.

The forgoing are examples of multiple opportunities for faculty and staff to identify needs and areas they would like to see enhanced and communicate those needs to the organizations and offices responsible for that process.

Preparedness of students entering phases of education

Student preparedness to enter sequential phases of the program is an inherent and fundamental part of the student evaluation/grading process in each course/clinical rotation/other educational opportunity. Collectively, student academic progress, including issues of inadequate performance and preparedness, is monitored and assessed by the School’s Educational Policy Committee (EPC). The charge to this committee is: *“The EPC shall develop, and recommend to the faculty for approval, policies governing grading, standards for promotion and graduation of students, standards of student conduct, student grievances, student dismissal and other matters*

related to student involvement in school programs as the need arises. The EPC shall meet at least twice each year to review the academic progress of all students, and shall convey its decisions on promotion, dismissal or other appropriate actions to the Dean of the School of Veterinary Medicine for communication to the students. The EPC shall prepare a report to the faculty each semester.”

Additional assessment that might assist the college in benchmarking its educational program

The SVM continues to review its academic programs and make appropriate changes on an ongoing basis. The following are examples of outcomes assessment mechanisms beyond the approaches outlined above.

1. Use of case studies and/or group presentations to assess student progress in critical thinking and problem solving and team-building skills (specific examples include case-studies in the Fundamental Principles of Anatomy course in year 1, and the Recitation in Infectious Disease Pathobiology and Veterinary Immunology courses in year 2)
2. Assessment of teaching through student evaluations and peer reviews
3. Departmental retreats and noon hour seminars dedicated to discussion of teaching and learning issues
4. Assessment of student hands-on skills in laboratories throughout the curriculum
5. Evaluation of student performance on externships/preceptorships/directed studies and on ambulatory rotations from professionals, including our ambulatory clinicians, outside the School (see below)
6. Student feedback to the Curriculum Committee and Faculty Student Liaison Committee (The latter is particularly able to mediate very rapid responses to student concerns that arise in monthly meetings of faculty representing each department and student representatives of each class in the DVM program.)
7. Assessment of student learning as demonstrated in clinical rotations – this has been enhanced through the recent introduction of a web-based student evaluation and grading system that allow for input from multiple faculty and technical staff members
8. Departmental review of courses

Assessment of students by private-practice ambulatory program adjunct faculty

All students are required to complete dairy ambulatory rotations outside the SVM under the mentorship of private practice adjunct faculty. These adjunct faculty members provide us with outside evaluator views of our students in two forms. First, they score each student they mentor using an evaluation tool that assesses a variety of attributes, including, but not limited to, history-taking, physical exam skills, technical skills, factors of professionalism, and thinking skills, problem-solving skills, and communication skills. Additionally, we periodically interview the ambulatory faculty to obtain assessments of our student’s performances more generally. This was most recently conducted in a comprehensive manner in 2006.

Assessment of students by externship/preceptorship/directed studies mentors from outside the SVM

Our students pursue an increasingly wide range of externships, preceptorships and/or directed studies outside the SVM as part of the fourth year in the DVM curriculum. Upon completion of

each such experience, the students are evaluated by their external experience mentor in 20 areas of academic and technical proficiencies, professionalism, problem-solving and communication skills, and ethical conduct. In cases in which substantial deficiencies are identified, the Associate Dean for Academic Affairs and/or the student's faculty advisor review the evaluations, speak with the external mentor by phone, and meet with the student. In so doing, we have an opportunity to address both deficiencies specific to an individual student and to observe/identify trends in unacceptable performance across our student body. These issues could then be directed to the appropriate departments and/or Curriculum Committee and drive revisions in our teaching program.

Departmental review of courses on an on-going basis

The SVM Departments have traditionally reviewed courses based on feedback from student evaluations completed at the conclusion of courses. Over the years, numerous courses have been changed in response to this feedback, both in subtle ways to fine tune already excellent courses, and in more dramatic forms of course re-organizations to address student concerns or evolving curricular needs. Examples of the latter include the re-organization in the past year of our offerings in companion animal nutrition and in small animal emergency & critical care.

To further enhance the departmental review process, the four departments of the SVM have each developed new processes for regular and repeated peer-review of courses. This process was conceived in part as a direct response to discussions in the Faculty-Student Liaison Committee regarding "closing-the-loop" between student evaluations of courses and the implementation of appropriate course changes. Under this program, each course in the DVM curriculum will be comprehensively reviewed by a subset of departmental faculty every three years, such that each course will ideally be reviewed twice in any one 7 year AVMA accreditation cycle. Initial reviews under this system will begin during summer 2008.

Progress on implementation of an overall curricular assessment plan

In 2004, the faculty of the SVM approved a comprehensive statement of ten "Curricular Definitions, Values and Goals." In 2006, the Curriculum Committee, working with the Associate Dean for Academic of Affairs and SVM faculty, developed a draft plan in which the various measures of assessment outlined above, as well as potential new assessment procedures, were linked to each curricular goal and to plans for how the information obtained will be disseminated and used to drive curricular change. This is an on-going project, but successes to date are reflected by the electronic fourth year clinical rotation evaluation system, the model for regular review of departmental courses, and the curricular changes noted in the Significant Program Changes section below.

More comprehensively, the SVM launched a two-year-long complete curriculum review in spring 2008. This process is being led by a 50% appointment Curriculum Review Coordinator, working in concert with the Associate Dean for Academic Affairs and four faculty/veterinary practitioner taskforces, each devoted to a specific area of the DVM educational program. These taskforces will also broadly seek current DVM student input for the review process.

Institutional outcomes

Educational mission: “Benchmarking” is done with regard to national studies and trends, with an example being the increased emphasis over several years toward those bodies of skills, knowledge, aptitudes, and attitudes that correlate highly with success in the profession. Important benchmarking and inter-institutional sharing of innovations and best practices occurs at an informal level. For example, the Associate Deans for Academic Affairs from schools/colleges of veterinary medicine throughout the U.S., Canada and portions of Europe meet at least annually through the Association of American Veterinary Medical Colleges to discuss issues. Successful approaches from one institution are then often emulated or tested elsewhere. At the faculty level, substantially similar information sharing occurs within disciplines at major meetings of their specialties, e.g., American College of Veterinary Internal Medicine meetings. The knowledge sharing at these meetings is important, as is the informal sharing of issues and ideas by email and telephone that regularly occurs as a result of that networking.

Research: The UW-Madison as a campus records, monitors, and shares data on research performance as a campus, but also subdivides those data not only by individual schools and colleges, but also by departments. Consequently, the SVM receives, by email, a Monthly Extramural Support Report that lists extramural funding data by school/college and by individual departments within that school. In addition to the current month data, each report also indicates year-to-date data, the prior year-to-date data, and the percentage change. Funding is also subdivided by agency source and by the fund designation for purposes of campus grants accounting. We find this process of tracking and benchmarking our performance in comparison to other campus units to be highly credible within the SVM, as well as with campus administration.

Describe the adequacy of resources and organization structure to meet the educational purposes

We have found our administrative structure to be sufficiently robust to cope with ongoing changes in our educational program. Such structures are always considered amenable to change if changing conditions so warrant. Resources are available from multiple sources beyond the specific SVM budget. For instance, at the campus level, we appreciate the teaching laboratory modernization program, which consistently provides important funding for initiatives that are important to our educational programs, with that funding adding capabilities beyond the annual base budget we receive from campus. We have found that this support, along with solicitation and procurement of funds from other sources, not only sustains our educational programs but allows us to provide program enhancements, e.g., the recent creation of the Technology for Learning Center and the Personal and Wellness Support Services office.

Assessment of faculty

By department: Each department conducts detailed annual evaluations of the performance of each individual faculty member. That process begins with the faculty member providing a detailed report of their activities and accomplishments, in all areas of assignment, during the previous year. Performance is then evaluated by the department, typically as a joint process of the Executive Committee (tenured department faculty) and the chair, and that evaluation then translates to formal recommendations to the faculty member for the forthcoming year. In

addition, those evaluations are used to determine merit salary increases as a basis for allocating the funds available in a given year for salary raises.

By VMTH: The VMTH instituted in 2004 an annual process of assessment and feedback of specified aspects of performance of individual clinicians (faculty, residents) by VMTH staff. In addition, the VMTH maintains a counterpart process of annual assessment and feedback of specified aspects of performance of individual VMTH staff by SVM clinicians (faculty, residents).

Describe any significant program changes (especially curriculum) that have resulted from the knowledge the college gained from carrying out outcome assessments.

The following changes have been implemented in the past year in response to outcomes assessment data.

- Several years ago a decision was made to move most of our small animal nutrition curriculum out of our nutrition course and into the companion animal medicine courses, leaving the nutrition course itself primarily focused on production animal nutrition. However, student feedback has indicated that more in-depth small animal nutrition education is needed. Therefore, a new, one credit, elective course focusing on nutritional management of disease in small animal patients (“Small Animal Nutrition – Using Nutrition to Enhance Patient Care”) was added to the curriculum in the fall, 2007 semester. This course was offered as a combined, weekend-long program that targets both graduate veterinarians as a continuing veterinary medical education (CVME) course and current DVM program students. This approach provides the educational experience combined with an opportunity for students to network with practitioners.
- Student interest in emergency and critical care topics has been increasing in recent years. Therefore, two new, one credit electives in this area were launched. The first is a multi-topic “Small Animal Emergency and Critical Care” offering. The second is a one credit, active-learning format, elective course focusing on management of small animal patients on ventilators (“Critical Care Ventilator Support Team”). This course is offered as a combination of lectures and required clinical care service in the veterinary medical teaching hospital, thus also addressing the desire for increased hands-on learning in the first three years of the curriculum. Furthermore, at the time of this writing, a new emergency medicine clinical rotation for fourth year DVM students is being considered by the SVM faculty.
- We began offering elective course work in clinical communications several years ago, initially as a single course and then expansion to both basic and advanced courses. The students who have taken those electives have repeatedly praised the courses and indicated in course evaluations that some training in this area should be required of all students. Therefore, core clinical communications training has expanded to two required courses, the first year “Health, History and Physical Exam” course and the “Introduction to the Veterinary Medical Teaching Hospital” course for second year students.
- Student feedback through the Faculty Student Liaison Committee and other mechanisms has suggested that the second year Veterinary Epidemiology course would benefit from additional case-based discussions and less lecturing on basic concepts. Therefore, this

course was one of the three targeted for revision under our “Use of Technology-enhanced Learning to Improve Teaching and Learning Across the Veterinary Medical Curriculum” grant. The basic concept areas of the course will be moved to web-based instruction, allowing for more case-based discussion during class meeting times.

The SVM Curriculum Committee and academic departments share responsibility for incorporating assessment data into the review of teaching and curricular content. The departments use student and faculty feedback to work with faculty on continuing to improve the instruction of individual courses. The Curriculum Committee is responsible for representing the faculty in reviewing the curriculum as a whole. The Faculty-Student Liaison Committee contributes feedback on the curriculum and other student-faculty interaction questions to specific faculty members, the departments, the Curriculum Committee, and SVM Administration as appropriate for the issue in question. While this system has successfully permitted the SVM to fine-tune its curriculum over the years, student feedback in recent years has increasingly suggested that our curriculum is so crowded as to limit its flexibility to respond to evolving student interests. Therefore, as noted above, the strategic planning process conducted in 2006 (with final plan approval in February, 2007) prioritized a need for a comprehensive curriculum review to ensure that our curriculum meets both the needs of our students and the profession. The strategic planning process further recognized that such a comprehensive review of the curriculum requires a dedicated leader and input from many individuals within the School. Thus, the School has created a 50% Curriculum Coordinator position and has selected a current academic staff member, to fill that position. As Curriculum Coordinator, she will, in coordination with the Associate Dean for Academic Affairs, work closely with Curriculum Committee, senior administrative leadership, and faculty-led curriculum review taskforces over the next two years to re-evaluate our current curriculum and recommend changes.

Briefly describe your plans for collecting clinical competencies

Our method for collecting and assessing clinical competencies has historically been embedded in the evaluation of fourth year students in externships/preceptorships and ambulatory rotations outside the SVM, and in their clinical rotations within the VMTH. However, in 2007-2008, we completed development of a more robust and active process to ensure that our graduates are prepared to function independently as entry-level veterinarians. During 2007, we created a faculty taskforce representing diverse areas of clinical training and charged them with developing a listing of expected clinical competencies and a functional method for evaluation of these competencies. The taskforce met as a group approximately every other week from July 2007 through April 2008, but members also worked independently and through discussion with other SVM colleagues throughout this period. The work of the taskforce began with a review of AVMA COE requirements, examples of clinical competencies statements/lists from other schools/colleges of veterinary medicine, and information/publications related to clinical competency assessment from the disciplines of human medicine and dentistry. These deliberations led to the decision that development of exhaustive lists of technical skills, duplicated for lists of individual species of animals, was not a desirable outcome; rather, the taskforce members concluded that the SVM clinical competencies should reflect the integrative nature of medicine and surgery as it is optimally practiced. The nine categories of competencies proscribed by the AVME COE were then assigned to the taskforce members to begin definition

of specific competencies within each category. The members consulted colleagues in various specialties throughout the SVM for advice and guidance in definition of the competencies, and the taskforce as a whole repeatedly discussed and refined the competency lists. Once a relatively complete draft set of competencies had been developed, input was sought from faculty in each of the SVM departments and a select group of 13 private practitioner veterinarians (in various areas of clinical practice) to be sure that the competencies reflected a primary care focus, consistent with the AVMA COE stipulation that competency be defined for an entry-level veterinarian. A final list of 81 competencies for the SVM was created.

Following creation of the initial draft list of competencies, the taskforce began simultaneously considering approaches for assessment of the competencies among our fourth year DVM students. The taskforce considered a wide variety of approaches to competency assessment, including examples that have been utilized by other institutions (veterinary medical, human medical, human dental). These included:

- Student-managed checklists/portfolios of clinical procedures and activities preformed (hard copy, PDA, web-based);
- Web-based enumeration of cases with specific diagnoses;
- Medical record reviews;
- Chart-simulated oral exams;
- Video-evaluation of student-client interactions;
- OSCEs (Objective Structured Clinical Exams);
- Evaluation of student interactions with standardized clients;
- Fly-on-the-wall or videotaped observation of student-client interactions;
- Computerized case simulations;
- Written examinations (hard-copy, web-based);
- Web-based evaluation of specific competencies by faculty/staff.

In considering these assessment methods, the taskforce considered feasibility within our DVM curriculum, costs (equipment needs, faculty time, student time), and ability to truly evaluate clinical skills. The taskforce felt that checklists of clinical procedures, enumeration of cases or performance on written examinations do not necessarily reflect competency. Oral exams of various forms (chart-simulated, OSCEs) were viewed as having significant value, but with unreasonable requirements for investment of faculty time, given the small size of our SVM faculty. Video-evaluation of student-client interactions was considered a reasonable approach for assessment of communication skills and other non-technical SKAs (skills, knowledge, and attitudes/aptitudes), but not necessarily more technical skills (and requires investment in equipment and a substantial commitment of faculty time). In the final analysis, the taskforce concluded that adaptation of the existing web-based assessment of DVM students already used by the SVM represented the most feasible approach and an approach that allows for direct observation of clinical skills and competency. (However, it is recognized that this spectrum of methods need not be mutually exclusive, and it is hoped that faculty will consider utilizing methods such as mini-OSCEs, fly-on-the-wall observation of student-client interactions, medical record reviews, web-based case simulations etc. to inform their evaluation of competency using the web-based VM4 student evaluation/grading system. Additionally, discussions are underway

at the time of this writing to estimate costs and other issues related to installation of video cameras in examination rooms/areas in the VMTH.)

The clinical competency assessment program was launched in May 2008 with the start of the clinical training year for the Class of 2009. A comprehensive system for data analysis has been developed in conjunction with a faculty consultant from the Departments of Statistics and Botany, University of Wisconsin-Madison.

Graduate Research Program Assessment

The Comparative Biomedical Science (CBMS) graduate program in the School of Veterinary Medicine is administered by the Department of Pathobiological Sciences (PBS). The CBMS Graduate Program was last reviewed by the Graduate School in Sept. 2000 (then known as the Veterinary Science graduate program and administered by the Dept of Animal Health and Biomedical Sciences).

The 2000 review of the CBMS by the Graduate School delineated many strengths of the program and pointed out areas for improvement. Both are outlined below as a report from CBMS:

The strengths of our program include good research projects, funding, space and training. Our students get many opportunities to mature in their research through seminars, participation in local, national and international scientific meetings. They are also provided opportunities and guidance in writing research proposals. Our students also are appropriately placed in postdoctoral fellowships or employed following graduation. The morale of our students is excellent.

For opportunities for improvement, the points made by the review committee are listed and immediately followed by our progress towards meeting the committee's suggestions and recommendations.

- 1) The School of Veterinary Medicine should take a more active role in sponsoring the CBMS graduate program. Although the governance of the CBMS Graduate Program has been distributed to all four departments in the School of Veterinary Medicine, financial support for several high priority initiatives from the representative departments and the SVM have not been realized:
 - a) funds for graduate student rotations
 - b) travel funds for special research projects/training
 - c) student research awards
 - Support for the CBMS program is primarily funding for research assistantships (RAs), supplementing graduate RA support from private and public grant sources. Unfortunately, due to significant cuts in state GPR funding to the University, the number of SVM-supported RA-ships has decreased.

- The Academic Committee of the CBMS graduate program has recently initiated contacts with the Wisconsin Alumni Foundation to develop sources of funding for graduate student rotations, travel awards and outstanding student awards.
 - Funds have been provided by the SVM for establishing rotations for incoming graduate students. Currently, funding is available to support rotations in the fall semester for a maximum of 2 students. One student will be rotating this fall.
- 2) There is a need for a formal orientation for new graduate students in the program.
- The chair of the Academic Committee, meets informally with the incoming students early in the fall semester to discuss the requirements and expectations of the graduate program. The coordinator of the graduate program, meets with each new graduate student individually to address any questions or concerns that they have regarding the program.
- 3) There is a need to advertise the program and recruit more aggressively to enhance the applicant pool.
- In 2004, the name of the graduate program was changed from Veterinary Science to Comparative Biomedical Sciences to more adequately reflect the research programs of our faculty trainers. Informal surveys suggested that many prospective students confused the Veterinary Science graduate degree with the DVM program. We have also eliminated the requirement of a Masters degree prior to admission into the PhD program, making the CBMS program more competitive in attracting high quality applicants, as many of the top level graduate programs both on campus and nationwide have the “direct to PhD” track. The website of the CBMS program has been revamped to make it more user friendly and easier to keep current. New links have been added to the home page of the School of Veterinary Medicine, making it easier for prospective students to find information regarding the graduate program.
 - The new training grants (Research Training for Veterinary Students and Graduate Training for Veterinarian Training) will provide higher visibility for our graduate program as well as enhance our applicant pool.
- 4) There is a need to set aside funds for student recruitment visits.
- The CBMS grad program has continued to be successful in competing for UW-Madison campus student recruitment funds. Last year (2007-2008) the program was awarded approximately \$11,000 for recruitment purposes. Four students visited our program this spring. All were interested in specific research programs within our graduate program. The majority of these students were on campus on the same day, and began their day with a breakfast orientation session hosted by our program chair. The students then met individually with faculty trainers with whom they were interested in working or who were identified by the trainers as potential students for their laboratories. A pizza lunch was also held to provide an opportunity for the prospective students to meet with the current graduate students. Prospective students were housed in hotels and hosted by faculty and students in the program. We are pleased to report that two of students who visited will be joining our program this fall.
- 5) Steps need to be taken to develop training grant applications to improve the quality of the

applicant pool.

- Four faculty trainers in the CBMS grad program are PIs of training grants and many of our trainers are affiliated with these and other training grants on campus. The training grants directed by CBMS faculty include: Cellular and Molecular Parasitology Training Grant, Neurobiology Training Grant, Research Training for Veterinary Students and Graduate Training for Veterinarian Training Grant. Both the Cellular and Molecular Parasitology program and the Neurobiology program are prestigious, increasing the visibility of our program and providing salary support for students recruited into our program. The Research Training for Veterinary Students provides support and training for veterinary students interested in obtaining a Master's degree. It is anticipated that a small number of these students will continue with a Ph.D. The Graduate Training for Veterinarians Training grant was recently awarded and two students have completed their first year in this training program. Two additional students have been added for the upcoming year.

6) A formal Comparative Biomedical Sciences graduate program retreat should be conducted each year to enhance the interaction and information exchange between faculty, postdoctoral fellows and graduate students.

- This is being discussed, but no action has been taken, primarily due to the lack of funds.

7) Opportunities for graduate students to participate in teaching in both informal and formalized settings should be encouraged.

- Although we no longer require that all students serve as teaching assistants for at least one semester, we do strongly encourage all students to gain teaching experience. We feel that there are many opportunities for the students in teaching in the DVM curriculum courses, graduate level courses and undergraduate courses.

In summary, we feel that we implemented a number of changes to our graduate that we anticipate will enhance our program. Many of these changes to the program have occurred recently and, thus, we cannot yet detail their effectiveness. One of the major areas of focus for has been to increase our domestic applicant pool, and we have made good progress in this area.

Graduate Student Outcomes Assessment: All graduate students are monitored throughout their graduate training. The student's progress through the graduate degree milestones (certification, prelim A, prelim B and defense for PhD candidates; certification and defense for MS candidates) are monitored by the Graduate Program Coordinator. Students not progressing in a timely fashion are reminded first by the Graduate Coordinator and then by the Academic Committee. Students are required to file annual progress reports, signed by all members of their graduate committee, to the Graduate Program Coordinator.

3. “Describe the assessment activity in your academic programs and departments.”

Our assessment activities for the DVM program overlap school-wide and department-wide definitions, and thus information regarding departmental level assessments is primarily included in section 2 above. However, by way of summary, department-level assessments include the following:

- student course evaluations;
- faculty peer review of courses and instructors;
- departmental-level course reviews and re-evaluation (new process as described above);
- course evaluation data derived from student exit surveys at the time of graduation, as well as surveys of graduates and their employers, which is shared with departments;
- feedback to departments from Faculty–Student Liaison Committee, Curriculum Committee and Admissions Committee discussions.

4. “Describe plans for academic assessment activities for the coming year in your school/college.”

As described above, the SVM has undertaken several new assessment projects during the 2007-2008 academic year related to the DVM degree program. During 2008-2009, we will:

- obtain and analyze the first year of data from our new clinical competencies assessment program;
- obtain and analyze the first year of data from our new alumni and employers of alumni web-based surveys;
- adapt our fourth year student exit survey to a web-based format;
- complete the taskforce phase of our comprehensive DVM curriculum review and begin drafting of a curriculum revision proposal.