

COLLEGE OF VETERINARY MEDICINE

ACADEMIC REPORT FOR 2012-2013

2012-2013 Highlights

1. Programmatic achievements

a. Student engagement and success

- To ensure that veterinary graduates are practice-ready, competent and confident, the DVM program engages students in experiential learning as they rotate through the diagnostic and clinical service units of the Veterinary Teaching Hospital (VTH), Veterinary Diagnostic Laboratory (VDL), and Animal Medical Learning Center (AMLC) at the Oregon Humane Society (OHS) in Portland. The College continued to develop these programs in 2012-2013, by increasing the number of cases submitted to the VTH, expanding VDL service in the area of fish diagnostics and lengthening the duration of the required Year-4 student rotation at the AMLC from 2 to 3 weeks.
- In addition to engaging in the formal curriculum, veterinary students are provided with a variety of extracurricular opportunities to develop more focused career interests and engender a commitment to public service. In 2012-2013, these included a clinical service trip to an underdeveloped region of Nicaragua and participation in student clubs, such as the shelter medicine club and the Veterinary Business Management Association. Generally, students take responsibility for organizing these activities, thereby honing their leadership and communication skills. Students also organized a number of successful events, including Pet Day & Open House, the SCAVMA Ride the Heart of the Valley (fundraising event to benefit the College), the Oregon Leadership Experience and Dedicated Service (OLEADS) workshop and the SCAVMA/Oregon Veterinary Conference Dinner (to encourage interaction between veterinarians and students).
- The College again sponsored a summer research program for veterinary students, with grant support from Merial Limited. Students enrolled in this program engaged in research projects under the direction of faculty, and participated in a series of learning opportunities designed to introduce them to experimental design, conduct of research, and presentation of data.

b. Research and its impact

- Strategic investments in research were made at both the College and divisional levels. These involved allocating funds for seed grants, equipment grants and start-up packages for new faculty. The College continued to benefit significantly from the Provost's Faculty Investment Initiative, with two new faculty positions in microbiome science and systems biology recruited and searches for one additional position in pharmacology initiated.

- To address a critical need for additional research space, the College implemented plans to construct a multi-user, BSL-2 laboratory of approximately 2,000 SF in Dryden Hall. This project will be completed by October, 2013 and also includes a new university classroom, expanded restroom facilities, additional faculty office space and updated accessibility.
- Continuing and new extramurally-funded research projects (>\$50K in total budget) are listed in Appendix 1.

c. Outreach and engagement, including international-level activities

- *Programs/projects/partnerships:* The College has three major programs that provide important clinical and diagnostic services to Oregon and the Pacific Northwest:
 - Veterinary Teaching Hospital. The VTH provides referral clinical service to small animals and both referral and primary care services to large animals in the specialties of internal medicine, surgery, theriogenology, cardiology, oncology, anesthesiology, and radiology. In addition, the Rural Veterinary Practice unit provides a field service to farmers within a 30 mile radius of Corvallis. Two College faculty have extension appointments and provide outreach in the areas of rural veterinary medicine and aquatic sciences.
 - Veterinary Diagnostic Laboratory. The VDL plays an essential role in protecting animal and public health through its involvement in the National Animal Health Laboratory Network (NAHLN), participation in the national surveillance program for avian influenza in waterfowl and classical swine fever, and provision of diagnostic testing for zoonotic and other animal diseases.
 - Oregon Humane Society. The partnership with the OHS involving operation of the AMLC makes possible the provision of shelter medicine services to animals in the Portland area and beyond.

A number of continuing education seminars and workshops were presented, including the following:

- Oregon Leadership Experience and Dedicated Service (OLEADS) workshop (January, 2013)
- Oregon Veterinary Conference, co-hosted with the Oregon Veterinary Medical Association (March, 2013)

Approximately 70% of faculty and staff have significant diagnostic and/or clinical service assignments, and all veterinary students were involved in the provision of these services. Outreach and engagement activities were integrated into the teaching and research missions of the College.

- *International-level activities:* In addition to several research programs with strong international collaborations, the College is formally engaged in the following educational programs involving international students and faculty:
 - Fourteen veterinary students from St. George's University in Grenada and Ross University in St. Kitts received their 4th year clinical training at the College. The students are assessed a contractual fee to cover the expenses of their education.

- The College participated in student exchanges with international academic institutions. Students from Japan, China and France were educated at the College. One veterinary student from OSU attends Toulouse University in France each summer. In addition, two veterinary students participating in the Science without Borders program in Brazil enrolled in College courses. The Department of Biomedical Sciences had one visiting professor from Saudi Arabia for the 2012-2013 school year and one Fulbright Scholar from Brazil.
- Veterinary students enrolled in an elective course traveled to Nicaragua where they provided clinical service to a rural community under the supervision of veterinarian mentors.
- A new MOU was signed with the University of the Pacific in Chile, and Dr. Clarke was invited to make two scientific presentations at a clinical pharmacology seminar in Santiago in March, 2013 to inaugurate the relationship.

d. Community and diversity

- Working with 4-H, the College offered its first summer camp for high school students. Attended by 10 students, the primary focus of this program is to encourage ethnic and racial minorities to explore career interests in veterinary medicine. Enrollment of excellent participants was greatly facilitated by the involvement of the superintendent of a school district with a relatively high representation of Hispanic students. This successful program will be held again in August, 2013 and 12 students have been registered, all of them from underserved communities.

e. Other appropriate initiatives

- Efforts to advance the strategic agenda of the Division of Health Sciences focused on submission of a Category I proposal to establish an interdisciplinary graduate program and recruitment of new faculty funded by the Provost's Faculty Investment initiative. In addition, the College of Veterinary Medicine and the College of Pharmacy completed the upgrade of the VTH drug room to a licensed retail and institutional pharmacy.
- Ongoing engagement with members of the College of Veterinary Medicine Advisory Council advanced the College's fundraising and strategic planning activities.

2. Brief assessment of unit's efforts

a. Student engagement and success

The College employs a variety of assessment measures to evaluate the effectiveness of its veterinary educational program, including student performance on the North American Veterinary Licensing Examination (NAVLE), survey of recent graduates, survey of employers, and exit interviews and surveys of graduating seniors. The Class of 2013 achieved a 100% pass rate on NAVLE on the first attempt versus a 92% average rate for all students graduating from accredited colleges in the US. Eighty percent of recent graduate respondents strongly agreed or agreed that they were satisfied with their education. Seventy-five percent of employers were satisfied or very satisfied with the overall skills, knowledge and performance of their Oregon State University graduates and 59% thought that OSU graduates were better prepared or much better prepared for

practice compared with graduates from other programs. The strongest approval ratings were in the areas of clinical knowledge, diagnostic reasoning and animal handling and surgical skills. Exit interviews and surveys of graduating seniors were reviewed by faculty and used to make any necessary revisions in the curriculum. Additional outcomes assessment instruments are being implemented to evaluate clinical competency of students. These include the use of real-time assessments, which involve periodic evaluations of senior students as they work up clinical cases in the VTH.

To ensure that graduates are ready to engage in veterinary practice, students must be exposed to a sufficient variety and number of clinical cases in the VTH and other clinical training programs. In 2012-2013, the number of small animal cases increased 20.2% compared with the previous year and the number of large animal cases increased by 12.3%. The total number of visits to the small animal and large animal clinics, respectively, were 7,797 (6,485 in FY12) and 1,900 (1,692 in FY12). Revenue generated from client fees increased 15.5% to \$5.21M (\$4.5M in FY12). Additional expense authority provided to the VTH derived from reimbursement for internal services amounted to \$644K (\$616K in FY12). The growth in case visits and revenue enabled the VTH to increase certified veterinary technician staffing, purchase new equipment and establish a new faculty position in critical care.

The College's primary care clinical education program at the OHS in Portland continued to perform exceptionally well. Seniors completed a required rotation (increased from 2 to 3 weeks) at the AMLC and in many cases enrolled in additional elective rotations. The approximately 6,500 cases treated at the AMLC provided excellent experience in small animal surgery (each student performed more than 40 surgeries) and general medicine, including the treatment of diseases not commonly seen in the referral service of the VTH. The College continued to invest in this high-value program by committing additional financial resources necessary for the hiring of a certified veterinary technician to oversee new educational programs in dentistry and behavioral medicine.

The College continued to do well in its faculty recruitment and retention efforts. Successful recruitments during 2011-2012 included a microbiome researcher and a systems biologist. Recruitments are underway to fill positions in pharmacology, small animal surgery and critical care. National searches for the positions of Dean of the College and Chair of the Department of Clinical Sciences are also underway.

b. Research and its impact

The total number and value of grants funded during the year were 24 and \$1,681,511, respectively. Grant and contract support declined relative to 2011-2012 (30 grants totaling \$1,956,307). Total research expenditures amounted to \$2,320,777. While it is anticipated that recent recruitment of faculty with significant research FTEs will increase the research competitiveness of the College, sustained mentoring of existing faculty and investment in research infrastructure will continue to be important, particularly in the clinical sciences disciplines. Expansion of research space in Dryden Hall is expected to advance the research mission of the College.

c. Outreach and engagement, including international-level activities

The College outreach program is centered around its clinical and diagnostic services, with less emphasis placed on extension and continuing education. The diagnostic and referral clinical services are important to the entire state as well as neighboring states.

Clinical training agreements with Ross and St. George's universities generate a significant amount of income, facilitate the provision of clinical services in the VTH and increase international and ethnic diversity of the student body. A number of educational partnerships are being developed with institutions in other countries, including Japan, China, France and Chile.

In an effort to secure a financially sustainable future for the VDL, a concerted effort is underway to develop new diagnostic tests and expand diagnostic services to take advantage of new opportunities in aquatic health. The VTH continued to recover well from the recent economic recession and enjoyed significant growth in case load and service revenue.

d. Community and diversity

Over 80% of veterinary students (91% in the Class of 2017) and 43% of College professorial faculty are women. Including Hispanic/Brazilian, African American, Middle Eastern and Asian Americans, approximately 15% of faculty are racial/ethnic minorities. The Class of 2017, admitted to the DVM program in 2013, has 18% minority representation. In summary, gender parity exists among College faculty whereas the student body is underrepresented with respect to men. In 2012-2013, the College initiated a summer camp for high school students in a long-term effort to increase the representation of minorities in its student body.

e. Other appropriate initiatives

The Division of Health Sciences is making good progress in achieving its strategic goals of: (1) developing integrative research programs closely aligned with interdisciplinary graduate education; (2) transforming the College of Health and Human Sciences into an accredited College of Public Health and Human Sciences; and (3) enhancing outreach. A Category I proposal to create a new interdisciplinary graduate program in Comparative Health Sciences was approved at the University level and will be reviewed externally in the near future, as required by Oregon University System policy. In the interim, post-DVM residents receiving clinical specialty training in the VTH and VDL are being provided the opportunity to enroll in other MS degrees.

The mission of the College of Veterinary Medicine Advisory Council is to advise the dean and to assist the dean in strategic planning, the development and implementation of short- and long-term goals, community outreach and service, and the garnering of financial support for education, research, and clinical and diagnostic care. Engagement of Council members resulted in several accomplishments, including completion of fundraising in support of an endowed professorship in camelid medicine.

3. Brief summary of major faculty and student awards

- Dr. Stuart Helfand received the Zoetis Award for Research Excellence.
- Dr. Anna Jolles and Dr. Craig Ruaux shared the New Investigator Award. This award recognizes the research potential of an early-career faculty member who is making good progress towards establishing a research program with an international reputation for excellence.
- Dr. Keith Poulsen received the Zoetis Distinguished Teacher Award.
- Approximately \$250K in merit-based scholarships and need-based grants were awarded to students.
- Sadie Curry received the Class of 2013 Academic Excellence Award (first place) and Ashley Hanna received the E.E. Wedman Outstanding Senior Award. These are the most prestigious annual awards presented to students.
- Faculty continued to serve on NIH study sections and as *ad hoc* reviewers for grant applications and manuscripts, and in leadership roles in multiple professional veterinary organizations.

4. Initiatives to leverage E&G and other base resources and to improve administrative efficiencies

- Alignment of the College mission and research program with strategic plans developed at the Divisional and University levels placed the College in a position to participate in investments made in new faculty positions and programs.
- Transfer of Veterinary Medicine Animal Isolation Laboratory (VMAIL) administration to the Research Office (now named the Research Animal Isolation Laboratory or RAIL) provided an opportunity for operating the facility more efficiently and created a more sustainable pathway for development of the program to meet the growing needs of the OSU biomedical sciences community.
- The most important factor in the improvement of the College budget in FY13 resulted from the growth in VTH case load and revenue. The 15.5% in clinical service revenue and 4.6% increase in internal reimbursements provided an additional budgetary expense capacity of over \$730K in comparison with FY12. This allowed the VTH to improve its staffing and purchase new equipment. Clinical, diagnostic and educational revenue is projected to be \$6.25M in FY14. This accounts for approximately 31% of the total E&G budget (versus 29% in FY13).
- After the transition in OSU Foundation staffing in 2011-2012, the College continued to build its development program, with an emphasis being placed on growing the donor prospect base, funding from foundations and industry partners, and engagement of Advisory Council members. Campaign giving amounted to \$1,383,904 with \$1,079,193 received through gifts and pledges and \$304,711 received through private grants. This represents a 62.3% increase over last year. Additional gifts amounting to \$2,813,389 are pending with \$1,028,589 in verbal commitments to close by 2014.

Results and Outcomes

- 1. Performance on College-level metrics – See Appendices 2, 3 & 4**

Appendix 1 - Continuing and new extramurally-funded research projects (>\$50K in total budget)

CVM Investigator	Abbreviated Title	Agency
Baltzer, Wendy I	Clinical nutritional study	Nestle Purina Pet Care
Bermudez, Luiz E	Treatment of <i>Francisella tularensis</i>	Corporate
Bermudez, Luiz E	HP contamination analysis	Hewlett-Packard Company
Bermudez, Luiz E	Genes associated with <i>M. Avium</i> pathogenesis	NIH
Hase, Claudia	Sea Grant Omnibus Program	NOAA
Dolan, Brian	MHC class I antigen presentation	NIH
Helfand, Stuart C	Alpha radioimmunotherapy for lymphoma treatment	Fred Hutchinson Cancer Research Center
Jolles, Anna E	Microparasite-Macroparasite Interactions	NSF
Jolles, Anna E	Feline immunodeficiency virus in African lions	Morris Animal Foundation
Magnusson, Kathy R	NMDA receptors and memory	NIH
Sarker, Mahfuzur R	Mechanisms of bacterial spore germination	University of Connecticut
Stieger-Vanegas, Susanne	CT-guided microwave tooth bud ablation	Oregon Nanoscience and Microtechnologies Institute

Oregon State University
College of Veterinary Medicine
 Annual Academic Program Review 2012-13

PART 1

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	% Change '11 - '13
Faculty FTE														
Professional	26.5	24.8	24.3	22.9	23.8	37.5	40.3	45.3	42.9	44.9	44.4	47.5	49.8	12.2%
Non-Professional	22.7	25.9	28.8	26.0	30.0	35.9	38.7	41.7	43.9	40.8	41.1	39.4	38	-7.5%
Total Faculty FTE	49.2	50.7	53.1	48.9	53.8	73.4	79.0	87.0	86.8	85.7	85.5	86.9	87.8	2.7%
E&G Tenured/Tenure Track	-	-	17.5	16.0	15.9	26.0	25.8	26.0	25.8	26.0	28.9	30.9	34.2	18.3%
Faculty Headcount														
Professional	27	25	25	23	25	39	43	48	45	48	48	51	53	10.4%
Non-Professional	24	27	30	29	32	38	40	43	47	44	44	43	41	-6.8%
Total Faculty Headcount	51	52	55	52	57	77	83	91	92	92	92	94	94	2.2%
E&G Tenured/Tenure Track	-	-	18	16	16	26	27	27	27	27	29	31	37	27.6%

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	% Change '11 - '13
SCH (Academic Year)														
Undergraduate	173	169	176	129	119	108	108	108	121	148	162	137	105	-35.2%
Lower Division	95	91	80	96	119	108	108	108	113	142	136	137	103	-24.3%
Upper Division	78	78	96	33	0	0	0	0	8	6	26	0	2	-92.3%
Graduate	165	69	77	100	116	153	138	118	55	106	214	424	532	148.6%
First Professional	3655	3667	3861	4395	7420	10016	10811	10778	10929	11676	11908	12064	12007	3.3%
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	-
TOTAL SCH	3993	3905	4114	4624	7655	10277	11057	11004	11105	11930	12284	12625	12644	2.9%

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	% Change '11 - '13
Fall Enrollment by Major														
Undergraduate	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Graduate	6	2	4	2	2	4	3	4	4	4	7	12	15	114.3%
First Professional	71	72	70	81	134	182	196	192	196	211	217	222	223	5.2%
TOTAL Enrollment	77	74	74	83	136	186	199	196	200	215	224	234	238	6.3%

Oregon State University
College of Veterinary Medicine
 STRATEGIC PLANNING METRICS 2012-13

PART 1

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	College Targets 2012-13
Goal 1. Provide Outstanding Academic Programs												
2004-05 Themes: Increase research and outreach. Increase diversity.	0	0	0	1	2	2	5	3	3	1	1	
1.2 Invention Disclosures												
1.3 % of Faculty, Staff, Students Comfortable with Climate for Diversity.	-	n/a	-	-	-	-	-	-	-	-	-	
1.4 % of US Minority Students of Total Enrollment	1.4%	3.6%	3.7%	3.2%	5.0%	5.1%	4.5%	6.5%	10.7%	11.5%	10.1%	
Goal 2. Improve the Teaching and Learning Environment												
2004-05 Themes: Improve student success and retention. Increase diversity.	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2.1 First Year Retention Rate (College/University)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2.2 6-Year Graduation Rate (College/University)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
2.5 Seniors Participating in Student Engagement Activities (%/Respondents)	-	n/a	n/a	-	n/a	-	-	n/a	-	-	-	
2.6 Student to Faculty FTE Ratio (Primary Majors/Course)	4.6/ 5.1	6.3/ 6.8	9.7/ 10.2	12.3/ 12.7	10.3/ 10.6	7.8/ 8.0	7.3/ 7.5	7.5/ 7.8	7.9/ 8.1	7.4/ 7.5	6.9/ 7.0	
2.x.1 DVM Graduation Rate	91.9	89.2	94.6	95.0	95.9	91.7	92.3	94.2	87.5	91.2	94.8	
2.x.2 First Year Retention Rate	100.0	97.9	97.9	97.9	98.0	88.0	96.0	98.0	94	92.0	0.93	
2.x.3 First Professional Students Admitted/ Applicants	36/ 507	48/ 659	48/ 669	51/ 672	49/ 658	48/632	50/554	54/516	56/463	53/508	54/751	
2.x.4 Graduate Students Admitted/ Applicants	3/ n/a	1/ 12	0/ 11	3/ 9	1/ 6	3/11	2/8	3/11	5/17	10/10	3/3	

Oregon State University
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PART 2

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	% Change '11 - '13
Resources (Fiscal Year)														
E&G - Initial Budget (\$)	8,124,832	8,365,081	8,508,325	12,651,813	11,262,689	12,703,443	14,777,878	16,411,919	16,938,396	17,003,111	17,781,285	17,494,408	18,966,715	6.7%
Total R&D Expenditures (\$)			973,245					2,313,693	3,402,872	3,100,921	3,937,470	2,902,614	Feb_2014	
1.1 Awards from Grants and Contracts* (#) 3.1	15	16	24	13	17	42	35	36	32	53	34	30	24	-
Awards from Grants and Contracts (\$) 3.1	631,486	428,285	2,336,356	829,067	1,583,444	2,168,870	2,697,040	2,084,053	4,111,116	3,545,550	2,618,166	1,956,307	1,681,511	-29.4%
Private Giving (\$) 3.2								2,031,869	2,603,264	1,566,990	852,854	1,214,819		-22.5%

Strategic Planning Metrics 2012-13

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	College Targets 2012
Goal 1. Provide Outstanding Academic Programs 2004-05 Themes: Increase research and outreach. Increase diversity.												
1.1 Total R&D Expenditures	see APR data above											
Goal 3. Increase Revenues												
3.1 Awards from Grants and Contracts (# / %)	see APR data above											
3.2 Annual Private Giving	see APR data above											

* From 2000-01 to 2007-08, the number of grant/contract awards is based on the accounting transactions from the College's award index, rather than the actual number of awards received by the college.

Oregon State University
College of Veterinary Medicine
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PART 3

Degrees (academic year)	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	% Change '11 - '13
Bachelor	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Master	1	0	0	1	1	0	1	2	1	1	1	1	2	100.0%
Doctorate	0	1	0	0	0	0	0	0	0	0	0	0	0	-
First Professional	34	36	34	33	35	37	50	44	48	43	49	58	55	12.2%
Total Degrees	35	37	34	34	36	37	51	46	49	44	50	59	57	14.0%

Strategic Planning Metrics 2012-13

	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	College Targets 2012-13
Goal 2. Improve the Teaching and Learning Environment												
2004-05 Themes: Improve student success and retention. Increase diversity.	34	33	35	37	50	44	48	43	49	58	55	
2.3 1st Professional (DVM) Degrees Awarded	0	1	1	0	1	2	1	1	1	1	2	
2.4 Graduate Degrees Awarded												