

## Part I – Agency Profile

### Agency Overview

The W-I (Washington-Idaho) Veterinary Medicine Program is administered in Idaho by the Head of the Department of Animal and Veterinary Science, College of Agricultural and Life Sciences, University of Idaho. Originally established in 1974, the W-I Program annually provides 44 Idaho residents with access to a veterinary medical education through a cooperative agreement between the University of Idaho and Washington State University. The Doctor of Veterinary Medicine (DVM) degree is awarded to Idaho students by Washington State University College of Veterinary Medicine. Idaho provides the cooperative program with the majority of veterinary students who have an expressed interest in production agriculture animals.

### Core Functions/Idaho Code

The University of Idaho provides educational opportunities for any senior student in the Washington State University College of Veterinary Medicine by providing the equivalent of 65, one-month teaching rotations in food animal production and clinical medicine at the Caine Veterinary Teaching Center (CVTC) in Caldwell. Faculty members at the Caine Center interact with Idaho veterinarians and livestock producers providing education and recommendations concerning animal production, diagnosis and clinical evaluation of disease situations.

1. Provide access to veterinary medical education at WSU for Idaho residents – the current W-I contract reserves 11 seats per year for Idaho veterinary medicine students. A total of 44 Idaho students are enrolled in this program each year.
2. Assist Idaho in meeting its needs for veterinarians – provide Idaho-trained, Idaho-resident graduate veterinarians to meet annual employment demands for the State. On average, 65-75% of new Idaho resident graduates of the W-I Program are licensed to practice veterinary medicine in Idaho annually.
3. Provide hands-on instruction opportunities for senior veterinary students – teaching rotations in food animal production medicine and clinical experience are offered year-round at the Caine Center in Caldwell.
4. Provide access to referrals from Idaho veterinarians in the areas of food animal production, diagnosis, and clinical evaluation of diseases – a) accept 400 to 500 hospital clinical referrals annually as student teaching cases; b) provide disease diagnostic testing on approximately 15,000 assays annually, and; c) conduct on-farm disease investigations for herd problems as requested by Idaho veterinarians and livestock producers.

## Washington-Idaho Veterinary Medicine Program

### Revenue and Expenditures:

Revenue	FY 2010	FY 2011	FY 2012	FY 2013
General Fund	\$1,828,900	\$1,822,500	\$1,811,300	\$1,882,300
<b>Total</b>	<b>\$1,828,900</b>	<b>\$1,822,500</b>	<b>\$1,811,300</b>	<b>\$1,882,300</b>
Expenditure	FY 2010	FY 2011	FY 2012	FY 2013
Personnel Costs	\$528,000	\$519,100	\$500,000	\$517,100
Operating Expenditures	1,200,900	1,203,400	1,211,300	1,244,300
Capital Outlay	0	0	0	20,900
Trustee/Benefit Payments	100,000	100,000	100,000	100,000
<b>Total</b>	<b>\$1,828,900</b>	<b>\$1,822,500</b>	<b>\$1,811,300</b>	<b>\$1,882,300</b>

**Profile of Cases Managed and/or Key Services Provided:**

Cases Managed and/or Key Services Provided	FY 2010	FY 2011	FY 2012	FY 2013
Number of Idaho Resident Students Enrolled Each Year	44	44	44	44
Number of One-Month Student Rotations (or equivalent) offered at the Caine Center Per Year	65	65	65	65
Number of Accepted Clinical Hospital Referral Cases	398	418	179	264
Number of Accepted Veterinary Diagnostic Samples	22,093	18,341	15,245	9,842

**Performance Highlights:**

**1) Teaching and learning at the Caine Center includes a variety of clinical experiences.**

- A. Professional Students.** Faculty instructs 4th-year veterinary students in hands-on production medicine and individual food animal medicine and surgery. Learning occurs in a variety of settings including hospital in/out-patient clinical care, field call services, disease investigations as well as formal presentations by faculty and guest lecturers. Several general and specialty blocks are offered, including:
- **General Food Animal Production Medicine and Surgery** – Twelve 2-week rotations in which students participate in hands-on clinical food animal medicine and surgery from the in-house referral clinic, farm visits including dairy, beef, and small ruminant, live animal surgery labs, and small group lectures.
  - **Small Ruminant Production Medicine** – Two 2-week rotation in which students participate in all aspects of sheep, goat, and now including camelid production medicine. This block includes in-house referrals, breeding soundness exams, ultrasound pregnancy exams, treatment of urolithiasis, foot trimming, vaccination and parasite programs, and dystocia management.
  - **Cow/Calf Production Medicine** – Two 2-week rotations in which students participate in all aspects of cow/calf production medicine. Students participate in cattle processing activities at the Nancy M. Cummings Research, Extension and Education Center (NMCREEC) near Salmon, ID as well as field beef work in the Treasure Valley and on the Palouse.
  - **Reproductive Biotechnology** – Two 2-week rotations in which students are provided the opportunity to learn and practice techniques such as artificial insemination, ultrasonography of the reproductive tract of females, early pregnancy diagnosis, fetal sexing, and embryo transfer.
  - **Feedlot Production Medicine**– Two 2-week rotation in which students learn about feedlot layout(s) and management, feeding operation(s), hospital and processing, and bio-security programs. Students conduct a nutritional evaluation of the feedlot with a local feedlot nutritionist and prepare a comprehensive report and critique to be presented both in written and verbal format at the conclusion of the rotation.
  - **Lambing Management** – Two 2-week rotation in which students work alongside the crew of a large range-flock producer during the lambing period. Students participate in management of normal and abnormal pre-parturient, peri-parturient, and post-parturient ewes, neonatal diseases, and other routine veterinary procedures that arise during the lambing season.
  - **Beef Calving** – One 2-week rotation which gives students on-ranch experience in beef calving. Students are assigned to selected cow-calf operations. At their assigned location, students will be involved in intensive heifer calving, mature cow calving, and calving calls with local veterinarians. The students evaluate their assigned operation and prepare a written report at the conclusion of the rotation.

- **Dairy Production Medicine** – Three 2-week rotations in which students are exposed to all aspects of dairy production medicine. Students spend time with local dairy practitioners, U of I Extension dairy specialists, and a dairy nutritionist. They also are exposed to the products side of the dairy industry with tours of processing plants.
  - B. Pre-veterinary Students.** A gift of \$5,000 was given by the J.A. Wedum Foundation to support a pre-veterinary summer intern. The applicants for this internship are U of I pre-vet students who excel in academics and are interested in gaining some experience with production animal medicine before applying to veterinary school.
  - C. Veterinary Technician Students.** We now offer a veterinary technician internship for College of Southern Idaho (CSI) students, in which the student works directly with our certified veterinary technician for a defined period of time to gain experience with production animals. We also provide cattle handling laboratories for veterinary technician students at two private institutions in the area.
- 2) Outreach is a major component of the CVTC program and the faculty and staff of the Caine Center.** Activities consist of providing veterinary medical information and consultation to local and regional veterinarians, producers, small-herd or individual-animal owners; and, CVTC faculty regularly present continuing education programs for veterinarians at local, state, regional and national meetings. Faculty and staff present veterinary medical information to producers and animal owners both through oral presentations and in written format through Cooperative Extension Service publications and in lay magazines and journals. During the reporting period, CVTC faculty presented at the American Dairy Goat Association, Payette River Cattlemen’s Association annual meetings, at The Jackson Hole Veterinary Rendezvous and the American Association of Small Ruminant Practitioners annual conference. The CVTC faculty contributed to *The Cattle Producers Library* produced by the Western Beef Resource Committee. Presentations were made to local Extension Service programs across the state. The CVTC faculty contributed to the *Owyhee County Cattlemen’s Corner* and to Idaho Cattle Association’s *Line Rider*. Tours of the CVTC and presentations at “career day” activities of local schools are also an outreach to the Idaho community. Members of the Caine Center faculty assist local and regional fairs with animal health and bio-security by performing health check of exhibited animals. Services were provided to the Payette, Owyhee, Twin Falls, Ada and Gem/Boise County Fairs.
- 3) FY2013 Grants and Contracts include \$73,300 in funding for the Northwest Bovine Veterinary Experience Program (NW-BVEP).** Now in its sixth year, the primary objective of this program is to use an aggressive mentoring program to increase the number of food animal veterinarians graduating from veterinary school and practicing in Idaho. Grant funding for this activity increased over \$15,000 from FY2012, and supported stipends for 21 students participating in the 2013 summer program.
- 4) FY2013 Grants and Contracts also include \$100,000 for a cooperative project with the Idaho Department of Fish and Game in the area of wildlife/domestic disease interaction, now in its 20<sup>th</sup> year.** Topics of investigation under this project umbrella include *Pasteurella*, *Mannheimia*, *Bibersteinia* and *Mycoplasma* species (PI: GC Weiser et al). Summary of recent research:
- A. Developed analyses of shedding of microbial pathogens by domestic sheep. This is a continuation of the cooperative UI/Caine Center and Idaho Fish & Game-USDA/ARS project to ascertain the flora and shedding patterns of domestic sheep, which could affect bighorn sheep health and management.
  - B. Defined mycoplasma from domestic and bighorn sheep, and identified virulence factors for further analysis.
  - C. Characterized a portion of the Pasteurellaceae collection and domestic sheep isolates by gcp PCR and 16S rRNA sequencing. This has been a major thrust and will be finished soon. These data will help elucidate the identities of pathogens carried by bighorn and domestic sheep and their relationships.
  - D. Publications: Three refereed publications came into print during the last year. Another has been accepted and one more is in review.

- 5) **A project initiated four years ago utilizing UI and USDA-ARS funding**, followed the bacterial shedding characteristics of 125 sheep at the U. S. Sheep Experiment Station (USSES) at Dubois, ID over a two-year period. Analysis indicated that individual sheep do indeed shed Pasteurellaceae potential pathogens at different rates. The results of that project stimulated research collaboration between USDA-ARS and the University of Idaho for a five-year, \$150,000 project to study the genetics of the sheep with regard to shedding of pathogens which cause respiratory disease (PI: GC Weiser, D Knowles et al).
- 6) **Teaching and learning have also been an integral part of the wildlife/domestic disease research conducted at the Caine Center.** This year we mentored a local student (Wilder High School) in a dual-enrollment honors program.
- 7) **During FY 2013, the Faculty at the Caine Center continued efforts in applied research, often in conjunction with veterinary teaching and outreach activities:**
  - A vaccine project is being conducted at the Nancy M. Cummings REEC (NMCREEC) near Salmon, ID to evaluate the potential of a vaccine for control of scours. This is a 3- to 5-year study funded by Zoetis (formerly Pfizer) Animal Health (PI: J England).
  - A flock of scrapie-positive sheep is still being maintained at the Caine Center. Tissues from these animals are utilized in ongoing research. We have on average 50 sheep available to TSE researchers, plus a very large bank of frozen tissues with known disease history and genotype. We also have a collection of scrapie brain homogenates, one of which has been described in the literature. One research paper is in the review process in collaboration with researchers in New Zealand, and a research abstract was presented at the International Sheep Conference in Rotorua, NZ, Feb. 2013 (PI: R. Kittelberger, SJ Sorensen et al).
  - Research continued this past year in the management of Johnne's disease in sheep and goats, also allowing for student interaction with several cooperative flocks and herds. Activities included: ultrasound pregnancy examination of yearling goats, collection of samples, and on-farm assistance with goat kidding (PI: N Dalton, MW Ayers, B Mamer).
  - The laboratory services program at the Caine Center includes a new contract with a private cancer research company which produces Immunohistochemistry (IHC) Assay Kits to identify prions in animal tissue. The Caine Center's experience and volume of scrapie tissue are utilized in quality assurance testing.

## Part II – Performance Measures

Performance Measure	FY 2010	FY 2011	FY 2012	FY 2013	Benchmark
1. Senior Veterinary Students Selecting Elective Rotations at the Caine Center.	80	54	71	67	40
2. Number/Percentage of Idaho Resident New Graduates Licensed to Practice Veterinary Medicine in Idaho.	7 Students (64%)	7 Students (64%)	6 Students (56%)	9 Students (82%)	7 students (65%)
3. Number of Disease Investigations Conducted by WI Faculty Members.	228	279	210	122	150
4. Number/Dollar Amount of Grants/Contracts by WI Faculty Members.	10 / \$303,350	9 / \$358,651	8 / \$242,476	8 / \$326,332	7 / \$300,000

## Performance Measure Notes:

Rotations offered as electives at the Caine Veterinary Teaching Center continue to be very popular with senior veterinary students and receive consistently high student evaluations. Diagnostic services and field service activities also remain strong.

Of the five faculty positions assigned to the W-I Program, four positions have been vacated during the period since July 2010 – one due to retirement (July 2010) and three due to resignation (September 2011, December 2012, and July 2013). The remaining faculty and one temporary hire have been handling a much heavier teaching and service/outreach load to try and maintain our teaching resources during that time. One position was filled (January 2013); Program Director and Veterinary Scientist, Dr. Gordon Brumbaugh, was hired and now provides leadership for the Caine Center and administrative structure for the W-I Veterinary Medicine Program. A Clinical Assistant Professor position has just been approved and a search will be conducted this fall. The two remaining vacancies each carry a portion of funding from Agricultural Research and Extension, and are under consideration by department and college administration.



Washington State University College of Veterinary Medicine (WSU CVM) has long been partners with the state of Idaho and the Western Interstate Commission of Higher Education (WICHE) program. WSU has announced a new educational partnership program with Utah State University (USU) at Logan. With this new partnership, the W-I Program is now known as the Washington-Idaho-Utah (WIU) Regional Program in Veterinary Medicine.

Designed as a “2+2 program”, the Utah students will spend their first two years in Logan, and the final two years at WSU in Pullman where, as seniors, they will have the opportunity to elect to participate in rotations at the Caine Center. Students accepted to this program earn a DVM degree from WSU College of Veterinary Medicine conferred by the Regents of Washington State University, with joint recognition of Utah State University. The first class of 20 Utah students entered the program at Logan in fall of 2012.

### For More Information Contact

Gordon W. Brumbaugh, DVM, PhD  
Associate Professor and Director  
Health Programs, W-I Veterinary Medicine  
Caine Veterinary Teaching Center  
1020 E. Homedale Road  
Caldwell, ID 83607  
Phone: (208) 454-8657  
E-mail: [gordonb@uidaho.edu](mailto:gordonb@uidaho.edu)  
Web: [www.cainecenter.uidaho.edu](http://www.cainecenter.uidaho.edu)