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Animal Health MATTERS Newsletter

Veterinary and Biomedical Sciences

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Animal Health MATTERS

David H. Zeman
South Dakota State University

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Animal Health MATTERS



Vol. 8, Issue 1

July 2005

Head/Director's Message

David H. Zeman, DVM, PhD
Head/Director, VSD/ADRDL/OBL

Greetings from the SDSU ADRDL faculty and staff. As I write this message we are thus far blessed with good spring rains in the region – quite a contrast to last year's drought. The prairie is green and - dare I use the word? - *lush* in some areas. There has been much organizational activity in the department and the ADRDL over the past six months. I will highlight several items:

- The ADRDL has submitted a cooperative agreement grant proposal to the USDA relative to information technology development as a member laboratory of the National Animal Health Network (NAHLN).
- The ADRDL has been accepted as a microbiology member laboratory of the Food Emergency Response Network (FERN). The purpose of FERN is to develop testing infrastructure to deal with emergencies related to the food supply.
- The ADRDL has completed its Select Agent Registration process with USDA. This relates to new federal regulations for security and exchange of dangerous pathogens, in settings including diagnostic and research laboratories.
- Effective January 1, 2005 the Veterinary Science Department was assigned to administer the Olson

- Biochemistry Laboratory. This is a major laboratory of the SDSU Agricultural Experiment Station and conducts testing to support the research, diagnostic, and commercial activities of the region's ag industry. Two faculty members and 13 career service chemists have been welcomed into the Veterinary Science Department. The OBL will remain in their current laboratory location in the SDSU Animal Science Complex.
- The 2010 Center for Infectious Disease Research and Vaccinology (CIDRV) is being ably assembled by Director Dr. David Francis. By summer's end there will be four new faculty on campus via the CIDRV: Ying Fang, Weiping Zhang, Philip Hardwidge, and Feng Li.
- Lastly, this issue contains an introduction of our new South Dakota Extension Veterinarian, Dr. Russ Daly. We are very enthused about this addition to our faculty. Dr. Daly will assume editorship of Animal Health Matters with this issue.

As always, it is a pleasure to serve South Dakota and the nation alongside all of you, as we improve and protect animal health!

Diagnostic News - SDSU ADRDL

New reusable mailers for biopsy submission

David Knudsen, DVM, MS, SDSU

In order to ease submission of surgical biopsy specimens and to shorten turn around time for diagnosis, the ADRDL will be providing reusable, returnable shipping containers to veterinary practices. This new ready to use shipper is designed for smaller specimens such as biopsy, cytology, and clinical pathology submissions. It will contain a small jar with formalin for the biopsy sample, a protective slide mailer for cytology submission, packing materials, instructions, and applicable forms. The first round of shippers will be sent to

regular lab clients free of charge in July, and additional shippers will be available at a nominal charge.

The ADRDL standard biopsy service includes histologic examination of up to three masses from the same animal, up to two special stains as indicated for diagnosis, and return of the biopsy shipping container with fresh formalin, all for a total fee of \$27. Our goal is to provide an initial diagnostic report on surgical biopsies within one to two working days of sample receipt. Please contact the lab for more information.

New mastitis submission form, procedures

R Daly, R. Parmar, SDSU

The ADRDL at SDSU has committed to improving milk sample culture and submission procedures. The newly revised submission form is included in this issue. Setup times have now been established for different submissions, which will improve turnaround time and efficiency:

- Individual quarter samples:
 - “Herd Surveillance” submissions consist of multiple samples from a herd, such as sampling a group of individuals for Staph. aureus, Mycoplasma, etc. These submissions will be set up on Mondays, Tuesdays, and Wednesdays.
 - “Clinical Mastitis” submissions are from individually-affected cases of mastitis and will be set up Monday through Friday.
- Bulk Tank samples will be set up on Mondays, Tuesdays, and Wednesdays. Practitioners will be able to request differentiation of non-ag Streps and coliforms (at additional charge).

These changes have been implemented in the interest of better serving the needs of the region’s dairy practitioners. The ADRDL staff is always open to comments and suggestions pertaining to these and other services offered.

Trichomonas testing at SDSU ADRDL adheres to OIE standards

Russ Daly, David Knudsen, SDSU

Culturing for *Tritrichomonas fetus* infection in bulls and cows has become a more common procedure lately in western and eastern South Dakota practices. A hallmark of Trichomonas testing at SDSU’s Animal Disease Research and Diagnostic Laboratory is strict adherence to OIE (World Organization for Animal Health) guidelines. The OIE publishes, among other documents, a [Manual of Diagnostic Tests and Vaccines for Terrestrial Animals](#) that is recognized by the World Trade Organization as rules for international reference. OIE Trichomonas testing guidelines include:

- Use of culture pouch (InPouch™ TF)
 - OIE endorsed culture media.
 - Serves also as transport media. Samples that will not arrive at the lab within 24 hours of collection should be submitted in transport media for optimum sensitivity. Use of the InPouch™ TF negates the need for separate transport media.

- Samples are incubated and examined directly in the pouch; there is no need for technicians to manually transfer culture media to a slide for examination.
- The entire pouch is examined under microscopy, ensuring that any trichomonads in the culture are detected.
- Convenience of sample collection: the smegma sample is deposited directly into the pouch, eliminating the need for transfer to another container before shipment to the lab.
- Cultures examined after appropriate length of time
 - OIE guidelines call for examination of culture media up to 7 days after inoculation (normally day 6 post-arrival at the lab). At the SDSU ADRDL, positive Trich cultures have not been noted prior to 4 days incubation at the earliest. Attempts to read results earlier, therefore, may result in false negatives.

Presumptive positive cultures are now analyzed via PCR at ADRDL for confirmation that *T. fetus* is present. Rarely, trichomonads other than *T. fetus* are cultured from the prepuce.

The ideal temperature for a loaded culture pouch is 59 to 98 degrees F. Do not ship culture pouches with ice packs, as the organisms are very sensitive to cold temperatures. The InPouch manufacturer also recommends that the uninoculated pouch should be shipped and stored at room temperature, and not refrigerated or frozen at any time before or after inoculation.

For further information regarding Tritrichomonas testing at SDSU, please refer to the ADRDL User Guide at <http://vetsci.sdstate.edu/userguide/userguide.pdf> or call us.

Announcement:

Due to a drastic drop in requests, the West Nile Virus IgM ELISA Serology test will be dropped as an ADRDL test offering. This test is mostly used for clinical horse suspects. We will send samples that arrive with this request to the Colorado State University AAVLD lab. However, samples may also be sent there directly by the practitioner. The ADRDL still offers IHC for West Nile Virus on postmortem specimens and collaborates with the Public Health Lab in Pierre and the USDA NVSL for PCR testing for WNV.

David H. Zeman, DVM, PhD
Director, ADRDL

Holiday hours:

September 5 – Labor Day
October 10 – Native American Day
November 11 – Veteran’s Day

BVD diagnostics at SDSU ADRDL: Demonstrating persistently infected cattle via antigen detection

R Daly, J Hennings, T Graham, SDSU

Bovine viral diarrhea (BVD) continues to play a significant role in the health status of our region's beef and dairy herds. Diagnostic tests for BVD continue to evolve, presenting practitioners with unprecedented tools and decisions to make regarding BVD testing in their clients' herds. The following is an overview of BVD diagnostics relative to detection of persistently infected animals (PI's) at SDSU. Practitioners are encouraged to consult the ADRDL Users Guide at <http://vetsci.sdstate.edu/userguide/userguide.pdf> for more information.

BVD antigen can be detected in various ways from several sample types. Demonstration of antigen in samples is an important step in detecting persistently infected (PI) calves. Differentiation between PI's and transiently infected calves is dependent on the sample, the test, and sampling time frame; differentiation between Type I and II subtypes is only possible with PCR.

BVD Antigen Capture ELISA (Ear Notch ELISA).

This is a recent addition to the BVD testing stable at SDSU. The test involves agitating a fresh ear notch in saline to elute antigen from the hair follicles. The fluid is then used in a microwell plate as for other ELISA tests, which allows for automation in processing and interpretation.

Use: Herd screening for BVD PI's. This method will also detect transiently infected animals, so a follow-up sample 4-6 weeks later should be taken to confirm PI status. We currently suggest that a follow-up sample consist of whole blood for VI or PCR, not an ear notch (see discussion below).

Sample needed: Ear notch, 1 cm x 1 cm from animal

How to ship: Put notch in individual snap cap tube and ship on ice. If sample will not get to the lab the next day, freeze the sample and ship on ice to prevent thawing. Samples may be kept in freezer (without a defrost cycle) up to one month and shipped together.

Setup and reporting: Test results are available on the same day the test is set up. To keep costs down, tests are batched together and run at least every 2-3 days.

Sensitivity = 100 %, **Specificity** = 98.4% (for detecting PI's when compared to gold standard of buffy coat VI and PCR)¹

Cost = \$4.00

Tests run at SDSU (April 1 to June 10, 2005):

- Practitioner cases: 124
- Samples: 3593
- Avg. Sample per case: 29.0

- Median # samples per case: 2
- Range of samples per case: 1 to 404
- Positive results: 6
- Positive cases: 6
- % positive cases: 4.8%
- % positive samples: 0.2%

Immunohistochemistry.

This test involves histologic examination of a formalin-fixed ear notch after processing and treatment with a BVD-specific immunohistochemical stain.

Use: Herd screening for BVD PI's. This method may also detect transiently infected animals, so a follow-up sample 4-6 weeks later should be taken to confirm PI status. Instances have been noted in which PI calves have become weak positives on follow-ups 3 weeks later; accordingly, submit blood for PCR or VI for the follow-up sample

Sample needed: Ear notch in buffered formalin.

How to ship: Ear notch in formalin in individual tubes. Specimens stored in formalin for over 5 days may result in false negatives. So when dealing with large herds, it is necessary to send samples every day or two days to ensure proper interpretation.

Setup and Reporting: Samples are set up all days of the week. Significant time is necessary for tissue processing and interpretation by a pathologist. Test results are available in 10-14 days.

Sensitivity = 100 %, **Specificity** = 98.8% (for detecting PI's when compared to gold standard of buffy coat VI and PCR)¹

Cost = \$ 4.00 (as of 7/1/05)

Tests run at SDSU (Jan. 1 to June 10, 2005):

- Cases: 381
- Samples: 10,910
- Avg. Samples per case: 28.6
- Median # samples per case: 4
- Range of samples per case: 1 to 759
- Positive results: 80
- Positive cases: 36
- % Positive cases: 9.4%
- % Positive samples: 0.7%
- PI prevalence within cases (> 25 samples/case): 0.1% (1/673) to 71.8% (28/39)

BVD Outgrowth (or Microplate VI) ELISA test

The outgrowth ELISA test differs from the "ear-notch" antigen-capture test. This test uses bovine cell lines in plates similar but a little larger than serology microwell plates. The cell lines enhance the growth of the virus (virus isolation), which is then detected by immunologic staining.

Animal Health Matters

Use: herd screening for PI animals. Maternal antibodies may interfere with testing, so this test is useful only on older calves (over 6 months). It is faster than regular virus isolation on serum or buffy coat. This procedure is often done to screen older animals when serum is submitted simultaneously for serology, etc.

- Acute infections are only very rarely detected with this method.
- This test may pick up animals that have been vaccinated within the past 3 weeks with a modified live BVD vaccine.

Sample needed: Serum. Take care to completely spin off serum from red blood cells. Do not ship on the clot. Hemolysis of the sample may result in toxicity to the cell lines and interference with test results.

How to submit: Chilled on ice packs. Freeze the samples if they need to be held longer than two days.

Setup and Reporting: Test is set up once a week on Fridays. Samples must be received before 10 AM on Friday. Results are read the following Wednesday.

Specificity: 100%, Sensitivity = 85.5% when compared to conventional virus isolation

Cost = \$6.00 (As of 7/1/05)

Tests run at SDSU (Jan. 1 to June 10, 2005):

- Cases: 207
- Samples: 3146
- Average samples per case: 15.2
- Median no. samples per case: 3
- Range of samples per case: 1 to 247
- Positive samples: 4
- Positive cases: 4
- % positive cases: 1.9%
- % positive samples: 0.1%
- Note: positive cases were all situations in which outgrowth ELISA was used to confirm PI status in animals with positive IHC ear notch tests.

Conventional Virus Isolation from serum or whole blood

This test relies on the growth of virus in specific cell lines and the observation of the effect of the virus on the cells.

Use: Detects viremia in individual animals. Since PI calves by definition are viremic for an extended time, VI may be used to confirm the PI status of animals with positive ear notches when used on whole blood buffy coats (calves). PI calves may also be detected with pre-colostral serum samples. Transiently infected calves may also be detected if a single sample is submitted during the viremic phase of disease.

Sample needed: Serum or whole blood (purple top EDTA tube, 5 ml minimum). Serum is preferred for detection of

PI's, as the test is somewhat more expedient. Do not use Venoject or PST tubes, as certain additives in those tubes may result in toxicity to the cell lines and interfere with test results.

How to submit: chilled on ice packs.

Setup and reporting: Samples are set up every day. Cultures are held two weeks before reported as negative; positive results are occasionally available sooner.

Cost = \$17.50 (2 passages: serum, buffy coat, tissues)

PCR (Polymerase Chain Reaction)

The current PCR test being performed at the ADRDL is a real-time PCR for screening of BVD in serum, buffy coats, bulk tank milk, semen, and tissues. Samples that are BVD positive by the screening test can then be typed as to type I or II. In addition, sequencing can also be performed if requested.

This is an extremely sensitive test that can detect very low numbers of viral particles. The reported sensitivity is 10 TCID₅₀/ml of BVD (equivalent to 1 ng/ml BVD RNA)² Because of this sensitivity, practitioners may utilize pooling for diagnostic efficiency.

Sample needed: Serum, whole blood, bulk tank milk samples, or semen. There are advantages and disadvantages of using different samples for PCR analysis.

- Buffy coat and serum. For example, serum may have lower amounts of BVD so that fewer samples are recommended for serum pooling compared to submitting whole blood (buffy coat). A maximum of 10 samples per pool for serum is recommended, whereas, 20 samples may be pooled for buffy coat samples.
- Bulk milk tank samples. This is a highly economical test for screening herds with potential persistently infected animals. Submission of 50 ml. of milk (not frozen or spoiled) is recommended.
- Semen. If semen needs to be tested for export, usually virus isolation is performed since other viruses besides BVD can be detected by VI.
- Tissues. Pooled tissues can be submitted (eg. lung, lymphoid tissues, heart, spleen, kidney, intestine)

Setup and reporting: The test is performed once weekly. If STAT results are needed, these can also be performed by contacting the Molecular Diagnostics Section at the ADRDL, or Dr. Jane Hennings.

Cost= \$25.00. The cost per actual sample submitted may be as low as **\$1.25 per sample**, depending on the # of samples that are pooled (eg. 10-20 samples pooled is equivalent to only **\$1.25-2.50 per sample**), so this is a very economical test to run if samples are pooled.

Editors Note: What samples to submit? What tests to run? Suggestions...

A. Herd or group screening of individuals: beef and dairy calves.

- Ear notches, submitted fresh, chilled, or frozen for **Antigen-capture ELISA (Ear notch ELISA)**.

Antigen-capture ELISA holds several benefits relative to IHC: Faster turnaround time, less subjectivity in reading of results, no formalin necessary, more flexibility with submitting samples (no concern that samples may sit in formalin too long). At SDSU, there has been 100% correlation between ear notch ELISA and IHC results.

B. Herd or group screening of individuals: older (> 6 mo.) cattle.

- Serum, removed from clot, chilled or frozen for **BVD Outgrowth VI ELISA**.

Serum samples may be screened effectively for PI's on older animals by use of the outgrowth VI ELISA. This procedure may be useful in cases where serum is being submitted for other tests, e.g. Johne's, Anaplasmosis, etc, and is commonly used to screen ET recipients, for example. Maternal antibodies may produce false negatives, and recent MLV BVD vaccine use may produce false positives.

- Or...serum or whole blood samples that will be pooled for **PCR**.

Pooled groups are tested and then individuals identified by testing individual samples within the pool. Very economical, unless a high prevalence of pools with PI's are present.

- Ear notches for antigen-capture ELISA (see above)

C. Screening for presence of PI's within a population: dairy

- Bulk tank (or string) milk samples (50 ml, chilled, not frozen) for **PCR**.
- Or...serum or whole blood samples that will be pooled for **PCR**. (see above).

D. Ear-notch positive animals: differentiating PI's from transiently infected calves

- Whole blood for **Virus Isolation (conventional)**
- Or...whole blood for **PCR**.
- Or...serum, removed from clot, chilled or frozen for **BVD Outgrowth VI ELISA**. (especially animals over 6 months of age)

A blood sample should be taken 4-6 weeks after the initial ear notch was taken. A second ear notch is not recommended since some *transiently* infected calves have been ear notch positive for two consecutive months (Ag-capture ELISA) and three consecutive months (IHC). In fact, one transiently infected calf in the Wyoming study¹ (see below) remained IHC positive for 8 months, despite being VI and PCR negative.

REFERENCES:

¹Cornish TE, van Olphen AL, Cavender JL, Edwards JM, Jaeger PT, Vieyra LL, Woodard LF, Miller DR, O'Toole D. 2005. Comparison of ear notch immunohistochemistry, ear notch antigen-capture ELISA, and buffy coat virus isolation for detection of calves persistently infected with bovine viral diarrhea virus. J Vet Diagn Invest. 17:110-7.

²Mahlum C., S. Haugerud, J. Shivers, K. Rossow, S. Goyal, J. Collins, K. Faaberg. 2002. Detection of bovine viral diarrhea virus by Taqman reverse transcription polymerase chain reaction. J. Vet. Diagn. Invest. 14:120-125.



Comparing IHC, Ear Notch ELISA and Buffy Coat VI for detecting PI BVD calves

Two techniques performed on skin biopsy samples (ear notches), immunohistochemistry (IHC) and antigen-capture ELISA (Ear notch ELISA, or "AgELISA"), were compared for detection of bovine viral diarrhea virus (BVDV) persistent infection (PI) in 559 Angus calves between the ages of 1 and 5 months. The calves also were tested for BVDV infection using virus isolation (VI) and reverse transcription (RT)-PCR on buffy coat samples and for antibodies to BVDV types 1a and 2 by serum neutralization (SN). Sixty-seven of 559 (12.0%) calves tested positive at initial screening by IHC, AgELISA, or VI, and all 67 were kept for a minimum of 3 months and retested monthly by IHC, AgELISA, VI, RT-PCR, and SN. Of the calves positive at initial screening, 59/67 (88.1%) were determined PI and 8/67 (11.9%) were determined acutely infected. Both IHC and AgELISA detected 100% of PI calves; however, IHC and AgELISA also detected 6 and 8 acutely infected calves, respectively, at initial screening. Furthermore, IHC and AgELISA continued to detect 3 and 4 acutely infected calves, respectively, 3 months after initial screening. Three acutely infected calves had IHC staining indistinguishable from PI calves at initial screening. Both IHC and AgELISA are accurate at detecting BVDV-infected calves, but veterinarians and producers should be advised that both tests detect some calves acutely infected with BVDV in addition to PI animals. Repeat testing using VI or RT-PCR on buffy coat samples should be performed at 30 days after initial screening to conclusively discriminate between acute and PI.

Taken from: Cornish TE, van Olphen AL, Cavender JL, Edwards JM, Jaeger PT, Vieyra LL, Woodard LF, Miller DR, O'Toole D. 2005. Comparison of ear notch immunohistochemistry, ear notch antigen-capture ELISA, and buffy coat virus isolation for detection of calves persistently infected with bovine viral diarrhea virus. *J Vet Diagn Invest.* 17:110-7.

Editor's Note: This study reaffirms the value of ear notch ELISA and IHC for detection of BVD PI's, as 100% of PI calves were detected with both methods. However, both tests also detected some transiently infected animals at time frames much longer than many people had been accustomed to seeing. Therefore it is currently recommended to reconfirm positive ear notch samples with VI or PCR on blood 30 or more days later. True persistently infected animals will be VI or PCR positive that long afterwards.

The investigators also performed serum neutralization tests for BVD type Ia and II on all calves. Interestingly, almost all of the transiently infected calves had extremely high titers to BVD type II ($\geq 1:8192$), while the PI calves exhibited very low or negative titers. This is based on only 8 transiently infected calves, but could signal an area of further

research in differentiating PI from transiently infected animals.

Practitioners should base their recommendations on the management of these ear-notch positive calves according to each producer's unique situation. Unless large numbers of animals or valuable animals are involved, immediate culling may be opted for in light of an initial ear-notch positive case. In those cases where valuable animals or several animals are involved, proper segregation and isolation of positive calves should be maintained in the interval between ear notch and confirmatory tests. When several PI animals are present in a herd, it is not hard to imagine scenarios in which some of those calves are in fact transiently infected due to exposure to their PI herdmates and will be negative on the confirmatory test.

We now have at our disposal unprecedented knowledge and tools for aiding our producers in dealing with and eliminating persistently infected BVD animals from their herds. Our understanding of these tools continues to evolve as new procedures and techniques come to light. SDSU's ADRDL is committed to developing and communicating this knowledge to our region's veterinarians and producers.

Extension News - SDSU ADRDL

NCVEI looking for help from large animal veterinarians

Russ Daly, DVM, SDSU

The National Commission on Veterinary Economic Issues (NCVEI) is a joint effort of the American Veterinary Medical Association (AVMA), American Animal Hospital Association (AAHA), and the Association of American Veterinary Medical Colleges (AAVMC). Their stated mission is to improve the economic base of the veterinary profession.

For some time now, the NCVEI has maintained an online benchmarking program that is available at no charge to AVMA and AAHA members. Currently, the site boasts benchmarking tools for companion animal and equine veterinarians. Nearly 10,000 practices utilize these tools. The site is very user-friendly and is meant to give you an idea where your practice stands relative to other practices across the nation and specific to your region. Information is analyzed not only for fees charged compared to other practices, but also on topics such as practice revenue, management, human resources, facilities, and marketing. The tools for small animals and equine practices are available

at <http://ncvei.org>. You will need to have your AVMA ID number handy (look at your billing notice or membership card if you still have it).

Now the NCVEI is embarking on the same mission to aid mixed and food animal practitioners, and they are currently looking for veterinarians to provide "seed data" for their database. The data is kept strictly confidential and can be entered over multiple visits to the site. The information asked for is rather detailed and needs to be partitioned into the different species. For example, if your practice is 50% dairy and 50% beef, under the "total annual revenue" question, you would enter 50% of your total revenue in the beef tool and 50% in the dairy tool. When the tools are released, a filter would split out this data.

The seed data site contains checklists that can easily be printed and used offline to fill out the questions on paper. In many cases, practices could have their office manager fill out the forms and enter the information.

The seed data site is different from the main site and is located at <http://dev.ncvei.org>. Entering data will involve a little bit of effort, but sites like this need accurate, "real-world" data (hopefully well-represented by South Dakota and regional practices). The more clinics willing to enter data, the more useful it will be to the profession.

New dean of agriculture on the job at SDSU

Lance Nixon, Editor
AgBio Communications Unit
South Dakota State University

South Dakota State University's new dean of the College of Agriculture and Biological Sciences will be meeting South Dakotans face to face in the coming months at experiment farm tours and other SDSU events.

Gary Lemme, an SDSU alumnus and former SDSU professor, returned to SDSU to become head of the ABS College starting May 2.

"This summer and fall provide a unique opportunity for me as a new dean to listen to the people of the state of South Dakota, to learn what their needs are and to make sure that as we go forward with our planning processes in focusing our programs in teaching, research and Extension, that we're meeting those needs," Lemme said.

Lemme was an SDSU plant science faculty member from 1981 to 1990. He earned his bachelor's degree in agricultural education in 1974 from SDSU, where he also completed his master's degree in agronomy in 1975. He earned his doctorate in agronomy in 1979 from the University of Nebraska-Lincoln.

A soil scientist by training, Lemme served most recently as professor and associate director of the Michigan Agricultural Experiment Station at Michigan State University in East Lansing. Before that he was professor and head of the University of Minnesota's West Central Research and Outreach Center in Morris. He also served previously as assistant dean of academic affairs for the College of Tropical Agriculture and Human Resources at the University of Hawaii in Honolulu.

Lemme said all three missions of the land-grant university system – teaching, research and Extension programs – are crucial for South Dakotans. "South Dakota State University has the mission of developing new science and technology to improve the economic wealth and quality of life of all of the citizens of South Dakota," Lemme said. "That was the founding principle of the land-grant universities and is still the guiding light that we use in the College of Agriculture and Biological Sciences in designing our undergraduate and graduate teaching programs, our research programs, and our Extension programs. We need to meet the needs of today but position our state for the future."

Lemme's wife, Theresa, and their son, Carl, also have SDSU ties. Theresa Lemme earned her master's degree and doctorate from SDSU. Carl Lemme earned his bachelor's degree from SDSU and currently works for Brookings-based Mid-West Seed Services Inc.

Thaler named interim Animal & Range Sciences head

Lance Nixon, Editor
AgBio Communications Unit
South Dakota State University

SDSU professor and Extension Swine Specialist Bob Thaler has been named the interim head of South Dakota State University's Department of Animal and Range Sciences.

Gary Lemme, dean of SDSU's College of Agriculture and Biological Sciences, announced the appointment, which takes effect July 1.

In his interim role Thaler will replace Don Boggs, who is leaving SDSU as of July 1 to become associate dean for academic programs in Kansas State University's College of Agriculture.

Thaler will be the initial contact person for the Department of Animal and Range Sciences and will chair the Animal & Range Sciences Leadership Team. The leadership team will meet weekly to make major decisions pertaining to the department until a new department head is named.

"The goal of the leadership team is for each of us to provide leadership in the area that we're most experienced in, while still being able to keep our current programs active and productive," Thaler said.

The leadership team includes professor Doug McFarland, who will coordinate research and graduate studies; professor and SDSU Extension Sheep Specialist Jeff Held, who will coordinate the Extension activities; professor Robbi Pritchard, who will oversee the activities of the farm units and outlying research stations; and assistant professor Kelly Bruns, who will work with Thaler to oversee the department's teaching and advising responsibilities. Thaler will be responsible for the areas not covered by the members of the leadership team.

A search for a replacement for Boggs is under way and will take an estimated six months to a year, Lemme said.

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The SDSU Veterinary Science Department conducts research, teaching, professional service, and extension service to South Dakota and the surrounding region. Entities within the department include the South Dakota Animal Disease Research and Diagnostic Laboratory, the Olson Biochemistry Laboratory, and the Center for Infectious Disease Research and Vaccinology.

The South Dakota Animal Disease Research and Diagnostic Laboratory is a full-service, all-species diagnostic laboratory accredited by the *American Association of Veterinary Laboratory Diagnosticians (AAVLD)*. The AAVLD accreditation program complies with international expectations for quality diagnostic services under the guidance of the *World Organization for Animal Health (the OIE)*. The ADRDL collaborates with the USDA National Veterinary Services Laboratory on many federal disease monitor and eradication programs and is a member of the National Animal Health Laboratory Network. For information regarding the laboratory's Quality System, contact Rajesh Parmar – ADRDL Quality Manager. at 605 688 4309.

Phone: (605) 688-5171 · Fax: (605) 688-6003 · Website: <http://vetsci.sdstate.edu>

Calendar of Events

August 14-17 – South Dakota Veterinary Medical Assoc. Annual Meeting, Ramkota Inn, Sioux Falls, SD

Large and small animal sessions: Mycoplasma bovis, perinatal calf disease, biosecurity, rural practice; feline internal medicine, canine cardiology; equine respiratory disease, much more. 605-688-6649

August 4-6 – Academy of Veterinary Consultants Summer Meeting, Airport Embassy Suites, Kansas City, MO <http://www.avc-beef.org/>

August 7-9 – North Dakota Veterinary Medical Assoc. Annual Meeting, Medora, ND 701-221-7740

August 11, 2005 – George A. Young Swine Health and Management Conference, Marina Inn, South Sioux City, NE. <http://georgeyoungswineconference.unl.edu/>

August 27-30 – Central Veterinary Conference, Kansas City, MO <http://www.thecvc.com>

September 22-24 – American Association of Bovine Practitioners, Salt Palace Convention Center, Salt Lake City, UT <http://www.aabp.org/meeting/default.asp>

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