

South Dakota State University
**Open PRAIRIE: Open Public Research Access Institutional
Repository and Information Exchange**

Animal Health MATTERS Newsletter

Veterinary and Biomedical Sciences

8-15-2014

Animal Health MATTERS

Russ Daly
South Dakota State University

Jane Hennings
South Dakota State University

Follow this and additional works at: http://openprairie.sdstate.edu/vbs_news



Part of the [Veterinary Medicine Commons](#)

Recommended Citation

Daly, Russ and Hennings, Jane, "Animal Health MATTERS" (2014). *Animal Health MATTERS Newsletter*. Paper 28.
http://openprairie.sdstate.edu/vbs_news/28

This Newsletter is brought to you for free and open access by the Veterinary and Biomedical Sciences at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in Animal Health MATTERS Newsletter by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



Vol. 17, Issue 2

Animal Health MATTERS

August 2014



ADRDL Welcomes Pathologist Pillatzki

Russ Daly DVM, SDSU

The newest pathologist at the South Dakota State University Animal Disease Research and Diagnostic Laboratory (ADRDL) is also a familiar face to staff and clients. Dr. Angela Pillatzki served ADRDL clients for eight years as a post-doctoral pathologist, instructor, and assistant professor before moving to Iowa State University in 2008. She brings back with her a wealth of experience and knowledge that will greatly serve clients of the lab.

Dr. Pillatzki used her time at Iowa State to serve as a Resident in the Veterinary Pathology Department in the College of Veterinary Medicine, where she handled pathology cases and served as an instructor to students in the professional veterinary curriculum. She was awarded a fellowship through the American College of Veterinary Pathology and Society of Toxicologic Pathology (sponsors: Charles River Labs and Pfizer) to assist with her training. In 2012, she became a diplomate of the American College of Veterinary Pathologists (anatomic pathology). Dr. Pillatzki's hiring made her the only board-certified pathologist on

the ADRDL staff.

Following her board certification, Dr. Pillatzki joined the Veterinary Diagnostic Laboratory staff at Iowa State as a clinician and veterinary diagnostician. She served in that role for two years, during which she was responsible for swine, cattle and other livestock diagnostic cases in the ISU diagnostic lab. She was especially involved in initial work that characterized the effects of a never-before-seen virus in the US, Porcine Epidemic Diarrhea Virus.

Dr. Pillatzki brings practice experience to her position at SDSU, having practiced at the Black Hills Animal Hospital in Rapid City, then at Melrose-Albany-Upsala Veterinary Associates in Albany, Minnesota for four years. Angela received her DVM from Kansas State University in 1995 and an MS degree in veterinary pathobiology from SDSU in 2007.

"The opportunity to come back to SDSU was too good to pass up. The diagnostic lab at SDSU has an excellent reputation among its peers as a lab that is dedicated to quality service, extension and research. That reputation has been forged by the people who work here. So, being a part of a reputable lab that employs great people, and is close to family seemed like a win-win-win situation," according to Dr. Pillatzki.

Although her time away from SDSU was relatively short, Dr. Pillatzki has noticed changes since her previous time at the ADRDL. "The biggest change has been in personnel," she said. "There has been addition of new



Dr. Angela Pillatzki, DVM, MS, DACVP, is the newest pathologist at SDSU's ADRDL

faculty and appointments of long-standing faculty to new positions. These changes are good ones; they are opportunities for the lab to grow and expand in new directions, better serving the needs of its current and future clientele. I was sad to see that the Olson Biochemistry Lab was no longer a part of the university, though. The lab employed dedicated people who were very knowledgeable and provided a valuable service to South Dakota and the region."

Dr. Pillatzki's duties at the ADRDL consist of coordinating pathology cases and being in charge of the histopathology section at the lab. "In particular, infectious diseases of food animals will always be my main interest. It is the best way for me to stay connected to clinical practice

Pillatzki (Continued on page 7)

More New Hires to Start Soon at VBS Department

In addition to Dr. Pillatzki, two more faculty members will begin serving the department's stakeholders this fall. Dr. **Diego Diel** from the University of Illinois will join the VBSD and will have research and diagnostic responsibilities. His interests particularly lie in molecular virology and vaccine research. In addition, another research faculty member, Dr. **Joy Scaria** will arrive in September from Cornell University. Dr. Scaria's interests are in bacteriology and particularly genetic sequencing of bacterial organisms. These latest faculty additions will be featured in the next issue of *Animal Health Matters*.

Director's Message: Addressing Critical Needs of the ADRDL—A White Paper

Jane Hennings, DVM, MS — Director ADRDL

For those of you that have ever moved from one location to another, you know how much effort this takes--especially if you move the “heavy” stuff yourself! This past year, we have had to do some moving, due to growth and expansion of diagnostics and research.



With the advent of “new diseases” (eg. porcine epidemic diarrhea virus (PEDV) and porcine deltacoronavirus (PDCoV)), new sections that were added after the 1993 ADRDL addition was built (eg. Molecular Diagnostics and Food Safety) and continuing research and training of undergraduate and graduate students in “animal and public health”; expanding to other buildings and making laboratory rooms out of previous “closets” was inevitable. This summer we moved much of the research laboratory to the Olson Biochemistry Laboratory remodel in the Animal Science Department and are currently moving some of the diagnostic sections to the research laboratory in the ADRDL. However, this creates some “disconnect” within the department where diagnostics, teaching and research were previously within the same facility for better communication and biosecurity and biosafety.

Over the past several months, I have been working with our university administration on articulating the need for expansion of the ADRDL (under one roof) to those who may be in positions to help us make facility upgrades a reality. The following are some excerpts from a white paper that we have been working on to do just that:

Background:

- The ADRDL has long provided an important line of defense in protecting the state’s livestock industry as well as human health. The lab can trace its roots back to 1887 when it began in the South Dakota Agricultural Experiment Station.
- The ADRDL serves the state and region with timely veterinary diag-

nostic services, disease research, and student training. Only 34 states have fully-accredited state diagnostic laboratories; the ADRDL is the only one in SD.

- The lab helps protect South Dakota’s \$4 billion livestock industry through a full range of diagnostic tests.
- The lab’s expertise means we are a partner with federal agencies such as the USDA (National Animal Health Laboratory Network) and FDA (Food Emergency Response Network) to help the U.S. quickly respond to major animal disease and food safety threats.
- The ADRDL has international prominence in developing new diagnostic tests for new diseases, like the recent porcine epidemic diarrhea virus (PEDV) outbreak, Porcine Reproductive and Respiratory Syndrome Virus (PRRSV), and common illnesses like shipping fever in cattle.
- The lab helps protect human health by testing animals for rabies and other diseases which pass from animals to people, collaborating with the SD State Public Health Lab.
- ADRDL diagnostic services help protect South Dakota’s wildlife population through cooperation with SD Game Fish and Parks.
- Economic development through ADRDL activities has resulted in biomedical inventions (57), commercial licenses (25), U.S. patents (31) and local spin-off companies (2) that provide jobs for South Dakota citizens.
- The lab has a long tradition of educating and training students in modern biomedical techniques, providing for workforce development in the state and region.

The current situation:

- The current ADRDL facility on the SDSU campus (built in 1968) was last updated in 1993 when the legislature authorized a \$5.4 million bond issue which was fully repaid in FY2014.

- The 1993 lab’s capacity has been surpassed because of growth in our livestock industry and higher expectations from veterinarians and livestock producers for cutting-edge diagnostic technologies and services. In addition, molecular diagnostics and food safety sections have been added to a facility that was not designed to include them in 1993.
- Should a highly contagious, devastating disease, such as foot and mouth disease (FMD) of livestock, occur in South Dakota, it will be necessary to conduct the extensive testing needed in a secure BSL3 laboratory in order to prevent spread of the virus. The ADRDL has only BSL2 space. Without adequate BSL-3 diagnostic capacity, South Dakota has very little means to protect itself in the face of such a threat.

Needs and Vision:

- Several entities, including the American Association of Veterinary Laboratory Diagnosticians (AAVLD) and USDA have cited the need for expansion and renovation of our existing facility.
- An independent needs assessment by an international veterinary facilities architect noted that the ADRDL does not have the necessary BSL3 facilities to protect South Dakota’s animal agricultural industries.
- The assessment noted that the existing facilities and systems are inadequate for both current and projected future diagnostic volume.
- In addition, the 1993 facilities and building systems are not able to adequately keep up with employee health and safety requirements nor proper environmental protections.
- Student training is hampered by a lack of space, creating a gap in biomedical workforce development in South Dakota.

Director’s Message

(Continued on page 7)

Reporting Requirements for Swine Enteric Coronaviruses: What They Mean for Swine Producers and their Veterinarians

In early June, the USDA issued a Federal Order requiring the reporting of disease caused by swine enteric coronaviruses such as Porcine Epidemic Diarrhea Virus (PEDV) and Porcine Deltacoronavirus (PDCoV).

These diseases first emerged in the United States in the spring of 2013. Since then, many states, including South Dakota, have declared these diseases to be reportable to state officials. In addition, since the emergence of PEDV, the SDSU ADRDL has been anonymously reporting the number of tests and number of positive results to the USDA. This was the lab's contribution to an early effort by the National Animal Health Network to informally follow the spread and emergence of this new disease.

Through this Federal Order, when a positive PEDV/PDCoV result is found at the lab on the appropriate samples, the following information from the submission is required to be reported:

- Premises identification number (PIN) issued by state animal health officials (in South Dakota, the Animal Industry Board);
- Date of sample collection;
- Type of unit being sampled (e.g. sow, nursery, finisher);
- Test methods used to make the diagnosis; and
- Diagnostic test results.

In addition to the reporting requirement, the Federal Order provides for some assistance for swine producers who suspect PEDV in their herds:

1. **Free PEDV/PDCoV testing.** This order includes funding to help producers with the initial diagnosis of PEDV or PDCoV in their herds. In order to take advantage of this testing assistance:

- Samples must originate from a premise associated with specific farm sites and live pigs. In other words, environmental samples

from truck washes, trailers, feed and feed mills are not eligible.

- Approved samples include: intestines, feces, fecal swabs, oral fluids, and environmental samples specifically associated with a farm. For example, environmental swabs from flooring in a hog building would be acceptable.
- Samples must be submitted with a Premises ID number (PIN).
- Right now, PCR testing is the only method approved under this order.

2. Swine producers with farms that meet the USDA's case definition can apply for **monetary assistance in developing a herd management plan** for PEDV/PDCoV (below). Up to \$150 is available (reimbursable through veterinarians) for this service.

3. Swine producers with affected herds can apply for USDA **assistance in carrying out certain portions of their herd management plan**. Farms can receive from \$250 to \$735 per month to help cover the costs of truck washing and disinfecting, and the purchase of certain disinfectants effective against PEDV/PDCoV. If producers wish to take advantage of these funds, they must have these activities (e.g. truck washing and disinfectant use) spelled out in the herd management plan they have submitted.

Herd Management Plans

The Herd Management Plans required by this order are a unique component of the program. Herds determined to meet the case definition of PEDV/PDCoV are required to submit a Herd Management Plan to the USDA representative in their state (in South Dakota, Dr. Lynn Tesar in Pierre). These plans need to address:

- Biosecurity of visitors and vehicles entering or exiting the premises
- Monitoring employee biosecurity
- Periodic herd health observation

- Animal movement (both into and out of the herd)
- Cleaning and disinfection of facilities
- Diagnostic testing to monitor the status of the herd infection and assess efficacy of control strategies
- Maintenance of records on pig movement that are accessible to State or Federal Animal Health officials upon request

Premises ID

Whenever possible, it is very useful to identify the premise site on the submission form with a Premise ID Number (PIN).

It is easy to get a PIN if one has not yet been obtained for a premise. Producers should work through their state animal health agency for this. In South Dakota, contact the Animal Industry Board (AIB) by:

- Registering for a PIN online at <http://aib.sd.gov/registerpremises.shtm>;
- Calling the AIB at (605)773-3321 to register over the phone;
- E-mailing the AIB at IDHELP@state.sd.us

The ADRDL will print you up sheets of barcode labels that you can use when submitting samples. To take advantage of this free service, visit <http://www.sdstate.edu/vs/adrdl/premisesid.cfm>, submit a few pieces of information, and the barcodes will be sent to you.

Information about the Federal Order requiring PEDV/PDCoV reporting can be found at: <http://www.aphis.usda.gov/animal-health/secd>. Call the lab at 605-688-5171 for questions about submissions. ■

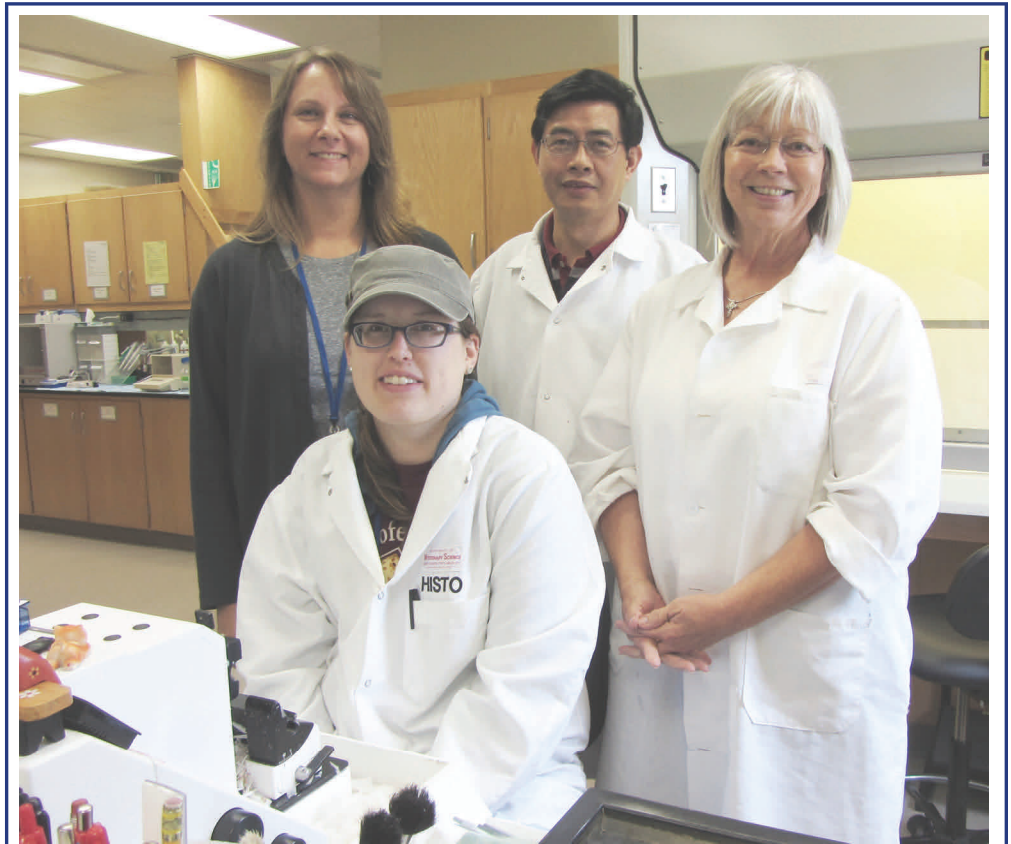
Histopathology and the Histology Laboratory at SDSU's ADRDL

Russ Daly DVM, SDSU

It's unlikely that most livestock producers or pet owners could easily define the term "histopathology." But the histopathology section within the South Dakota Animal Disease Research and Diagnostic Laboratory plays a key role in the diagnosis of animal diseases—not only in animals that have died (as a part of the necropsy), but in animals that are still alive as well (biopsy submissions).

The term, "histopathology" comes from the combination of "histology" (the microscopic anatomy of animal tissues) + "pathology" (the study of disease). The histology laboratory creates the microscope slides of diseased tissues that are examined by ADRDL pathologists to identify the specific disease process(es) occurring in an animal. This histopathologic diagnosis is a very key part of the overall diagnosis, especially with infectious diseases. Diagnostic procedures like bacteriology, virology, or molecular diagnostics can detect many bacteria and viruses in animals, but might not indicate whether those agents are causing the disease. By detecting microscopic damage in animal tissue related to those infectious agents, the pathologist can come up with a comprehensive diagnosis. This in turn will help the veterinarian manage the dynamics of the disease process.

This process begins with the submission of animal tissues, whether from a post-mortem examination in the field or a surgical biopsy from a live animal, in neutral buffered formalin. On average, formalin penetrates solid tissue (e.g. liver) at room temperature at a rate of approximately 1cm per 24 hours, so pieces of tissue 4cm³ are more than adequate for submission in formalin. After the tissue has been adequately fixed in the formalin, the tissue is trimmed down by technicians, placed in small cassettes, and embedded in paraffin. Microtomes are used to slice the tissue into very thin slices (the width of a human hair). These slices of tissue are placed on microscope slides, stained, and delivered to the pathologist



Histopathology staff at SDSU (L-R): Angela Pillatzki, Section Leader; Amanda Brock, Senior Microbiologist; Frank Qin, Senior Microbiologist; Karen Belau, Lab Technician.

for evaluation. In FY 2009, nearly 14,000 histopath slides were created by the section for use in ADRDL disease diagnostics and research projects.

In addition, specialized staining techniques such as immunohistochemistry (IHC) are utilized by the histopathology section. This involves treating tissue sections with stains that attach to a specific pathogen present in the tissues such as BVD virus in an ear notch. IHC is used to help diagnose conditions such as Chronic Wasting Disease in deer and elk, type 2 porcine circovirus in swine and bovine respiratory syncytial virus (BRSV) in cattle.

Biopsy specimens from live animals are examined by an ADRDL pathologist to determine if the lesion is infectious or cancerous; and if the lesion is cancerous, the pathologist will report the type of tumor and whether it is benign or malig-

nant. IHC can be used by the pathologist to identify expression of cell markers which can aid in the diagnosis of some poorly differentiated tumors. Determination of the tumor type can be important to the treating veterinarian in developing the appropriate chemotherapy protocol.

In the future, the histology laboratory plans to expand its services to researchers both on campus and in the private sector. This will likely involve the development of new IHC techniques.

An experienced staff of three full-time personnel and part-time student workers carry out the duties of the histology section at SDSU:

Dr. Angela Pillatzki, DVM, MS, DACVP, is the histology lab's section leader. She holds a DVM degree from Kansas State University, an MS degree from South Dakota State University, and became a Diplomate of the American

College of Veterinary Pathologists in 2012 following completion of residency training at Iowa State University. She has 10 years of veterinary diagnostic laboratory experience and was named section leader in June 2014 when she was hired as a diagnostic pathologist at SDSU. Her section leader duties include supervising personnel, assisting with troubleshooting, and overseeing changes in laboratory operations. Dr. Pillatzki also is involved with developing and maintaining quality control procedures and developing new techniques.

Amanda Brock BS, HT (ASCP), Senior Microbiologist, is a board certi-

fied histotechnician with 9 years of experience in the histology field. She started working in the tissue preparation section as a student in 2005. She graduated in May 2009 with a BS degree in Animal Science and began full time work in the histology section in August 2009. She left in 2010 to further her career in the histology world and returned in 2013 as the laboratory manager of the IHC section. Amanda's main responsibilities involve performing IHC procedures and new IHC test development.

Frank Qin MBA, Senior Microbiologist has 13 years' experience within the SDSU histopathology section and has served as laboratory manager. Prior to

coming to SDSU, Frank had nine years' experience in research work at the University of Kansas Medical Center.

Karen Belau, Laboratory Technician, handles the tissue preparation part of the laboratory, working with submissions from the necropsy floor and samples sent in from veterinarians. She has 24 years' experience at the ADRDL, both on the necropsy floor and within the histology section. Karen splits her time between tissue preparation and clinical pathology at the ADRDL. She attended SDSU for biology and microbiology, and holds a degree in Veterinary Office Management from Pipestone Vocational School. ■

Pre-Veterinary Students Honored by SDVMA and SDSU Through Stethoscope Ceremony

Russ Daly DVM, SDSU

The third annual Stethoscope Ceremony honoring SDSU pre-veterinary students was held on May 2, 2014, with a large crowd in attendance at the SDSU Student Union.

Seventeen students who had completed their pre-veterinary coursework at SDSU were presented Littmann Cardiology III stethoscopes courtesy of the SDSU Veterinary and Biomedical Sciences Department and the South Dakota Veterinary Medical Association (SDVMA). Each stethoscope was personalized with the student's name and an SDSU insignia, and was presented to each student by an individual of their choosing who had played a special role in their education while at SDSU.

In addition, Veterinary and Biomedical Sciences Department scholarships were awarded to returning pre-veterinary students for the upcoming school year at this event.

Addressing the students, faculty, and family members present were Tom Rentschler, DVM, SDVMA President from Tea; Dr. Barry Dunn, Dean, SDSU College of Agriculture and Biological Sciences, and Dr. Jane Hennings, Veterinary and Biomedical Sciences Department Head.

The stethoscope ceremony is a partnership between the SDVMA and the

SDSU Veterinary and Biomedical Sciences Department. The 17 students represent the highest number of pre-veterinary

students accepted into veterinary schools since the ceremony was first held three years ago. ■



SDSU Pre-veterinary students accepted to veterinary schools for Fall 2014. (Back row, L-R): Bryant Soulek, Zachary Williams, Ashley Wagner, Amanda Schmidt, Michelle Lenertz, Meagan Abraham. (Front row, L-R): Erica Houska, Rebecca Whitlock, Liz Devorak, Jenetta Porter, Hannah Ellsworth, Nathan Wilen. (Not pictured: Tishawanna Carpenter, Angela Gebhart, Cassie Hulstein, Brianna Sandager, and Ana Schweer).

Pieces and Parts

New OPP and CAE Tests to be Offered

The Small Ruminant Lentivirus cELISA test for OPP and CAE is the latest addition to the ADRDL's serologic testing stable. This competitive ELISA test is much more sensitive than the AGID test and will cost practitioners the same (\$5.00). Call the lab at 605-688-5171 for more information.

ADRDL Bacteriologist Serves as President

At the annual meeting of the Association of Veterinary Microbiologists this June in Knoxville, TN, SDSU's Seema Das was elected President Elect of the association. She will serve as president of the AVM in 2016.

ADRDL Case Reports at the 2014 SDVMA meeting

Sioux Falls Ramkota
Tuesday, August 12 at 2:30 PM

- **Tularemia in a South Dakota cat**
Dr. Dale Miskimins &
Dr. Heidi Sorensen
- **Bloody Diarrhea and Oral Ulcers in a 9-Month Old Calf: A Diagnosis You Might Not Expect**
Dr. Regg Neiger and Dr. Jeff Collins
- **Bovine Respiratory Diagnostics Utilizing PCR Technology**
Antibiotic Resistance in *Mannheimia hemolytica* cases
Dr. Angela Pillatzki
- **Using Serology to Investigate Reproductive Failure Due to Neospora in Beef Herds**
Dr. Russ Daly
- **Looking into the Role of Vaccines in IBR Abortion Cases**
Dr. Chris Chase

2014-2015 SDSU Veterinary and Biomedical Sciences Department Scholarship Award Winners



SDSU Pre-Veterinary scholarship award winners, 2014-2015. (Back row, L-R): Haley Peterson, Madison Bieber, Alex Rogen. (Front row, L-R): Katelyn Stark, Elen Skaar, Rachel Wilking, Shelby Steiner. (Not pictured: Olivia Kendall).

Dr. J.B. Taylor Memorial Scholarship: Olivia Kendall, Jordan, MN.

Dr. Harry Halverson Memorial Scholarship: Elen Skaar, Minneota, MN.

J. Michael Robbie Scholarship: Shelby Steiner, Fulda, MN; Rachel Wilking, Tracy, MN.

Freeman Lewis Scholarship: Haley Peterson, Spokane, WA; Alex Rogen, Brandon, SD; Madison Bieber, Bowdle, SD.

Richard and Carol Dierks Scholarship: Katelyn Stark, Sanborn, MN.

SDSU Pre- Veterinary Students Accepted to Veterinary Schools for Fall 2014

| | | | |
|--------------------|-------------------|---------------------------|---|
| Meagan Abraham | Ramona, SD | University of Minnesota | Dr. Chris Chase, VBS Dept., presenter |
| Tishawna Carpenter | Pipestone, MN | Iowa State University | Dr. Russ Daly, VBS Dept. |
| Liz Devorak | Montevideo, MN | Ross University | Myron Olson, VBS Dept. |
| Hannah Ellsworth | Fort Thompson, SD | Iowa State University | Dr. Rebecca Bott, Animal Science Dept. |
| Angela Gebhart | Maple Grove, MN | Colorado State University | Maia Moore, Brookings, presenter |
| Erica Houska | Sioux Falls, SD | Iowa State University | Dr. Vikram Mistry, Dairy Science Dept. |
| Cassie Hulstein | Edgerton, MN | Iowa State University | Dr. Jeff Clapper, Animal Science Dept. |
| Michelle Lenertz | Tracy, MN | University of Missouri | Dr. Dave Knudsen, VBS Dept. |
| Jenetta Porter | Geddes, SD | Iowa State University | Dr. Russ Daly, VBS Dept. |
| Brianna Sandager | Hills, MN | Iowa State University | Dr. Russ Daly, VBS Dept. |
| Amanda Schmidt | Vesta, MN | Iowa State University | Dr. Vikram Mistry, Dairy Science Dept. |
| Ana Schweer | Watertown, SD | Iowa State University | Dr. Alan Erickson, VBS Dept. |
| Bryant Soulek | Ravinia, SD | Iowa State University | Dr. Renee Nelsen, Montrose |
| Ashley Wagner | Montrose, SD | Iowa State University | Jen Eide, Animal Science Dept. |
| Rebecca Whitlock | Webster, SD | Ross University | Dr. Chris Chase, VBS Dept. |
| Nathan Wilen | Belle Fourche, SD | Iowa State University | Dr. Michael Gonda, Animal Science Dept. |
| Zachary Williams | Sioux Falls, SD | Iowa State University | |

Director's Message

(Continued from page 2)

The Price of Doing Nothing

If the ADRDL is not updated and expanded to meet current and projected needs, South Dakota will...

- be unable to adequately protect its growing dairy, pork, and poultry industries, its all-important cattle industry, and growing food processing industry from emerging disease threats, not to mention wildlife, aquaculture and companion animal diagnostic needs,
- have to rely on other states' BSL3 diagnostic laboratories to help contain a potential disease outbreak in South Dakota, while those labs' priorities are to protect their own states' livestock industries,
- be at risk for the health and safety of its ADRDL faculty and staff who work in outdated facilities,
- lose the opportunity to augment its biomedical workforce development strategy,
- have limited access to diagnostic tests and services to meet its public health responsibilities, and to protect its food animal industries, its pets and companion animals, and wildlife and fisheries populations; and will
- have no flexibility to help support the state public health laboratory in identification and control of rabies or other diseases that can be transmitted to people.

The Solution : Looking ahead to the next 20 years

Because of these concerns and deficiencies, an independent needs assessment has determined that a renovation and expansion of the ADRDL will address all of these needs for at least the next 20 years. In the months to come, we look forward to sharing this vision with you and our other stakeholders. Your past support was critical to getting the ADRDL to its current prominence, and it is tremendously appreciated. We will again need your support to make sure we can adequately protect South Dakota's animal and public health, now and in the future. ■

Pillatzki

(Continued from page 1)

and practicing veterinarians in the region. But I also enjoy variety; so providing diagnostic services for veterinarians caring for companion animals, laboratory animals and even wildlife is also very rewarding. Additionally, I think there will be opportunities for the department to expand its teaching, research and extension and diagnostic services centered on the "One Health" concept, and I look forward to being a part of that as well."

Angela is a native of Milbank, but grew up in Piedmont. She studied microbiology during her undergraduate years at the University of Wyoming. She lives in Brookings with her husband, Keith. Dr. Pil-



Dr. Angela Pillatzki (R) confers with Margaret Janssen, necropsy section clerical staff, about how to route samples from a case submitted to the ADRDL.

latzki also happens to be the proud owner of a 1967 Camaro, which she has owned since age 17! The ADRDL welcomes Dr. Pillatzki back to SDSU. ■

Continuing Education Events

August 10-13, 2014

South Dakota Veterinary Medical Association Annual Meeting
Ramkota Inn, Sioux Falls, SD

Large and small animal sessions: Growth technologies for cattle; food animal surgery; equine dentistry; companion animal allergic disease; clinical pathology; rabies; antibiotic resistance; SDSU case reports, much more.
605-688-6649 or www.sdvmed.org

August 17-19, 2014

North Dakota Veterinary Medical Association Annual Meeting
Ramada Plaza Suites, Fargo, ND <http://www.ndvma.com>

August 22-25, 2014

Central Veterinary Conference

Kansas City Convention and Entertainment Centers, Kansas City, MO
<http://www.thecvc.com>

September 18-19, 2014

Iowa Veterinary Medical Association Annual Meeting

Scheman CE Center, Ames, IA <http://www.iowavma.org/>

September 18-20, 2014

American Association of Bovine Practitioners Annual Meeting

Albuquerque Convention Center, Albuquerque, NM <http://www.aabp.org>

SOUTH DAKOTA STATE UNIVERSITY
SDSU Veterinary and Biomedical Sciences Department
Animal Disease Research & Diagnostic Laboratory
Box 2175- North Campus Drive
 Brookings, SD 57007-1396
 Phone: (605) 688-5171
 Fax: (605) 688-6003
 Website: www.sdstate.edu/vs

Non-Profit Org.
 U.S. Postage
PAID
 Brookings, SD
 Permit 24

Animal Health MATTERS

The SDSU Veterinary and Biomedical Sciences Department conducts research, teaching, professional service, and extension service to South Dakota and the surrounding region. An entity within the SDSU Veterinary and Biomedical Sciences Department, 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 monitoring 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.

Editor: Russ Daly, DVM

IN THIS ISSUE

| | |
|--|----------|
| ADRDL Welcomes Pathologist Pillatzki..... | 1 |
| More New Hires to Start Soon at VBS Department | 1 |
| Director's Message: Addressing Critical Needs of the ADRDL—A White Paper..... | 2 |
| Reporting Requirements for Swine Enteric Coronaviruses: What They Mean for Swine Producers and their Veterinarians | 3 |
| Histopathology and the Histology Laboratory at SDSU's ADRDL..... | 4 |
| Pre-Veterinary Students Honored by SDVMA and SDSU Through Stethoscope Ceremony..... | 5 |
| Pieces and Parts | |
| New OPP and CAE Tests to be Offered..... | 6 |
| ADRDL Bacteriologist Serves as President..... | 6 |
| ADRDL Case Reports at the 2014 SDVMA Meeting..... | 6 |
| 2014-2015 SDSU Veterinary and Biomedical Sciences Department Scholarship Award Winners..... | 6 |
| SDSU Pre-Veterinary Students Accepted to Veterinary Schools for Fall 2014..... | 6 |
| Continuing Education Events..... | 7 |