



Veterinary

executive report

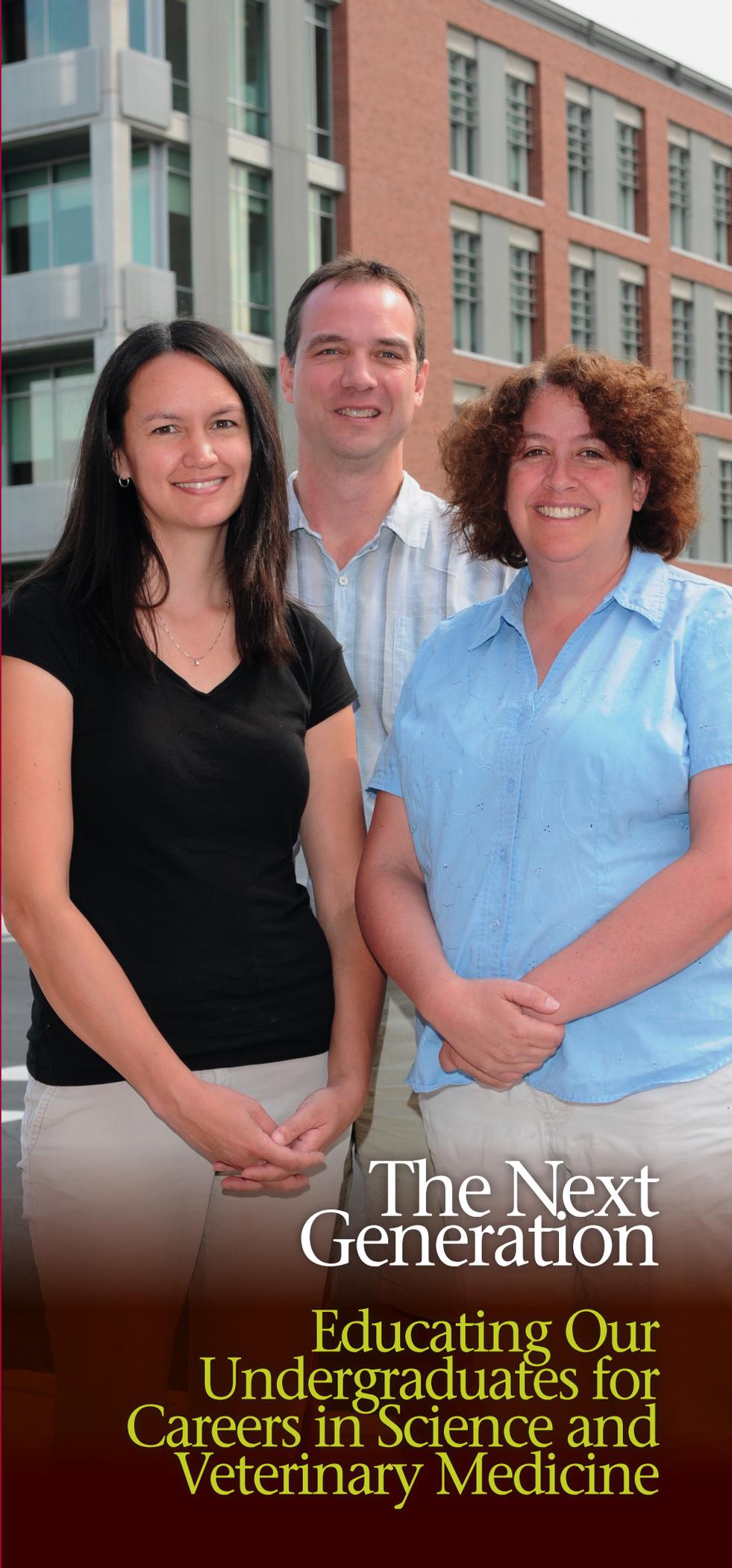
Fall 2012

Left to right:

*Dr. Julie Stanton,
clinical assistant
professor*

*Dr. Bill Davis,
associate dean for
undergraduate education*

*Dr. Jennifer Watts,
assistant professor*



The Next Generation

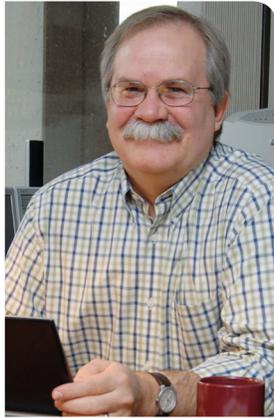
Educating Our
Undergraduates for
Careers in Science and
Veterinary Medicine

WASHINGTON STATE
UNIVERSITY



COLLEGE OF VETERINARY MEDICINE

Message from the Dean



Dean Bryan Slinker
WSU College of Veterinary Medicine

Veterinary Executive Report WSU College of Veterinary Medicine

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The *Veterinary Executive Report* is published
three times a year by the College of Veterinary
Medicine at Washington State University.
Issue # 30



10/12 139437

In a somewhat nostalgic mood, I write this just after welcoming the 125 bright faces of the class of 2016 to our program. There is the 115th class of DVM students to study at WSU. Thirty of these students will spend their first two years in the Logan, Utah, cohort of our new cooperative program. The inauguration of this program is one of several major milestones we realize this year after many years of planning.

A bit of history of our college is part of the students' orientation. When I began veterinary school here in 1976, we had two major buildings, Wegner Hall and McCoy Hall. While I was a student, Bustad Hall was built and Wegner Hall underwent a doubling in size through major renovation. Then, the new Veterinary Teaching Hospital (1996) and the Animal Disease Biotechnology Facility (1998) were built. And now, with the move of the School of Molecular Biosciences we include the Biomedical/Life Sciences Building (2009) as part of the college, and we enjoyed the dedication of the Paul G. Allen Center for Global Animal Health in September. Next spring, we move into the new Veterinary Medical Research Building, currently in its final stages of construction. We have come a long way from the "shed" that the Board of Regents authorized in 1895 to be constructed at the south end of the armory for the veterinary department—the cost not to exceed \$60. We always talk about the "shed" (which predated the "vet shack") as a metaphor for where we started as a frame of reference for what we have become.

But were it not for the commitment to the college and its programs by our students, faculty, staff, and by friends and alumni, we would not have merited this investment in our many excellent facilities. Our clinical programs continue to expand the boundaries of the state-of-the-art care for our many clients. Built on our long-standing success in infectious disease research and our diagnostic and disease surveillance expertise, the Allen School has gone from an idea on paper just five years ago to a growing academic unit with seven core full-time faculty in the college, numerous key faculty from other departments at WSU, a growing staff, a new building, at least 10 more faculty to hire in the next four years, and emerging programs in Tanzania and Kenya. Our research and graduate programs flourish across the college. We are embracing our undergraduate education mission and have begun to reorganize the administration of those degree programs under a new associate dean for undergraduate education, Bill Davis. I could go on and on, but finally, I want to note that our excellent DVM education program continues to develop as we seek to improve it. Leo Bustad's vision of a regional program that led to the Washington-Oregon-Idaho program has evolved to the Washington-Idaho-Utah program; we remain committed to serving the region well in all that we do, and doing so more capably because of these strong partnerships among neighboring states.

From the \$60 shed in 1895 and two graduates in the first DVM class of 1902, to the several hundred million dollar complexes of buildings we will have in 2013 and the 125 graduates we expect in the class of 2016, we have come a long way with your help and support. However, we will continue to need you—because although much has changed, we look forward to helping shape the future by striving for more.

And, as always, Go Cougs!

Dr. Bryan Slinker, Dean
WSU College of Veterinary Medicine

Preparing Students for the Careers of the Future

As a manager of a clinical laboratory with the US Air Force (USAF), Captain Cordy Herring needs to have science, business, and managerial expertise to do his job well. After he was selected to further his education in a USAF program, he looked at universities that would broaden those skills and the WSU Professional Science Master's Program rose to the top of his list.

"I called WSU and when the program was described to me it was exactly what I was looking for," said Herring, who has served with the USAF for 19 years and will be promoted to major later this year.

Students working toward a Professional Science Master's degree (PSM) through the WSU School of Molecular Biosciences complete science classes and coursework in professional areas such as ethics, management, communications, business, and professional skills. Students also complete an internship during their final year.

"Before, getting an MBA was the only option," explained Norah McCabe, a clinical associate professor in the School of Molecular Biosciences and director of the Professional Science Master's program. More versatile than the MBA, the PSM gives students the opportunity to expand their scientific knowledge and learn needed business and communication skills.

"It is truly an interdisciplinary degree," said McCabe, who helped develop the new master's option in 2010. Designed for recent graduates and returning professionals, it has grown from one student to 21 students in just two years. The program has already graduated two students, both of whom are now employed full-time.

While a traditional science master's degree may be better suited for those wanting a career in a scientific laboratory, many students are interested in applying their scientific knowledge in different ways in the workplace. And that is what appealed to Captain Herring.

"My job in the clinical laboratory is a blend of science and business," said Herring. Because leaders and policy makers may not always have a background in science, Herring believes the education he is receiving at WSU can help bridge that gap.



Captain Cordy Herring (right), with Dr. Sita Pappu of the WSU Research Foundation. Captain Herring will finish his professional science master's degree in the spring of 2013.

"I will be able to help explain the science to people who develop policy," said Herring. "It will add understanding between leaders, R&D people, and clinicians."

In his final year of the program, Herring is an intern with the WSU Research Foundation, which works to license WSU-developed technologies in the private sector.

"It is a great fit for me because I wanted more experience with the business side," said Herring. "I can't wait to go back and tell the Air Force leaders about the program and how well it fits with what we do."

To learn more about the professional science master's program in the School for Molecular Biosciences, visit molecular.biosciences.wsu.edu/graduates/PSM.htm.

The Next Generation

Educating Our Undergraduates for Careers in Science and Veterinary Medicine

James Bonner loves science. As a freshman, James knew he wanted to major in biochemistry, so when he was selected to be part of the new hands-on Science Education Alliance biology lab, or SEA lab, in the WSU School of Molecular Biosciences, he was thrilled.

“The lab brings abstract scientific concepts into everyday learning,” said Bonner, one of 24 randomly selected freshmen admitted to the SEA lab in fall 2011, the program’s pilot year.

Funded through a three-year grant from the Howard Hughes Medical Institute, the Science Education Alliance gives freshmen the chance to gain first-hand experience in a laboratory. During the first semester, students isolated, purified, and named a virus from a soil sample. Every sample is unique, creating a sense of ownership for the students that might not otherwise be evident in a traditional biology class setting.

“Normally students don’t have the chance to work in a real lab setting until their junior year,” said Dr. Julie Stanton, a clinical assistant professor in the School of Molecular Biosciences, who heads up the lab. “By exposing freshmen to a research lab environment, it can capture their excitement and involve them in the thrill of scientific discovery.”

The SEA lab is just one of several innovative undergraduate programs currently being offered at the WSU College of Veterinary Medicine.

“The long-term goal is to take all labs from the freshman through senior level and make them project-based,” said Dr.

“The STARS program has been an extremely enjoyable and beneficial experience for me. With early integration into the laboratory setting and lab work starting my freshman year, I am truly ahead of the curve compared to my peers.”

—Ross Rowsey, STARS student in the School of Molecular Biosciences



Left to right: students Amy Nusbaum and James Bonner with Julie Stanton, clinical assistant professor in the School of Molecular Biosciences.

Bill Davis, associate dean for undergraduate education. Davis was appointed associate dean in 2012 to coordinate the four undergraduate education programs in the college—neuroscience, biochemistry, microbiology, and genetics and cell biology.

Dr. Jennifer Watts, assistant professor of genetics in the School of Molecular Biosciences, leads a senior project-based genetics lab. Watts brings her own research expertise on lipid (fat) metabolism to the classroom lab so students can get a hands-on research experience.

“Students have the potential to discover something new, instead of simply repeating what others have done,” said Watts.

Using a microscopic worm called *C. elegans* to discover what genes may affect fatty acid and metabolism, students choose the genes they will screen, formulate a hypothesis, grow the worms, extract the fatty acids, and examine the resulting data. Then students write a scientific paper on the results.

“It is hypothesis driven,” said Watts. “Students may find something we were not expecting. There is a lot of potential to find and try new things.”

These types of classes give undergraduates first-hand research experience, which better trains students for future careers in science.

“We play a foundational role in undergraduate education to meet the mission of educating future scientists and veterinarians,” said Davis.

Undergraduates often work side-by-side with faculty and are encouraged to publish scientific articles with WSU professors. Lindsay Fry came to the college in 2002 to start a combined neuroscience/DVM program. Soon after she arrived she began working with WSU neuroscientist Dr. David Schneider, with whom she conducted research and co-authored a paper.

“There is value in taking young people and getting them excited about research,” said Fry. “To be 19 years old and be encouraged by professors to get into a lab was empowering.”

As a result of her research experience, Fry was selected for a Department of Homeland Security Scholarship to intern the summer of her junior year at the Plum Island Animal Disease Center in New York.

“I was so well prepared for the DVM program, and the research experience opened a lot of doors for me,” said Fry. “None of it would have been possible without the research experience as a neuroscience undergraduate.”

Now in the Ph.D. program in the Department of Veterinary Microbiology and Pathology, Dr. Fry is working with infectious diseases, like East Coast Fever, a tick-borne disease that can economically devastate cattle-dependent families in East Africa.

“The neuroscience program well prepared me for the DVM and the Ph.D.,” said Fry, who is also in the anatomic pathology residency program with the USDA-ARS-ADRU and VMP.

The Students Targeted toward Advanced Research Studies (STARS) program in the School of Molecular Biosciences also prepares students for graduate level work. The program allows exceptional undergraduate students to jump on the fast track to graduate with a doctorate in as few as seven years. Ross Rowsey was selected for the STARS program as a freshman in 2008, the program’s first year.

“The STARS program has been an extremely enjoyable and beneficial experience for me,” said Rowsey, who was admitted to the program right out of high school. “With early integration into the laboratory setting and lab work starting my freshman year, I am truly ahead of the curve compared to my peers.”

Rowsey, who is expected to graduate in 2015 with his doctoral degree, will be one of the first graduates of the STARS program and will have completed his undergraduate and doctoral degrees in seven years. Graduates of STARS will go on to be leaders in the scientific community in such fields as biotechnology, medicine, and the life sciences.



Lindsay Fry

“I was so well prepared for the DVM program, and the research experience opened a lot of doors for me. None of it would have been possible without the research experience as a neuroscience undergraduate.”

—Lindsay Fry, B.S. Neuroscience, DVM, and currently a Ph.D. student in the Veterinary Microbiology and Pathology department

“We have opportunities for growth in our undergraduate educational programs,” said Davis. “How we manage that growth is important for our students. Our undergraduates are future employees, graduate students, and human or animal health professionals.”

To learn more about STARS or the neuroscience program at the college, visit www.smb.wsu.edu/STARS or www.vetmed.wsu.edu/Neuroscience.



Lynne Haley,
director of development

From the Office of Development and External Relations

As you read in our cover story, the college's four undergraduate programs—neuroscience, biochemistry, microbiology, and genetics and cell biology—prepare our students to become future veterinarians and scientists. Undergraduate scholarships, such as the Peter A.

Zornes Memorial Neuroscience Scholarship, support our students and position them to pursue an advanced education. Undergraduates who have received the Zornes Memorial Scholarship, for instance, have gone on to veterinary school at WSU and Colorado State University, medical school at the University of British Columbia Faculty of Medicine, and Harvard Medical School.

The Zornes Scholarship fund was established in 2006 with only \$200 and the first scholarship recipient received \$500 in 2008. That same year marked the first Peter Zornes Memorial Golf Tournament to help raise enough money to award the second recipient the full amount of the scholarship (\$1,000). By 2012, enough funds had been raised to award two \$1,000 scholarships. To date, six deserving neuroscience students have received a Peter A. Zornes Memorial Neuroscience Scholarship.

Continued support by alumni and friends of the college can make a big difference in the lives of our undergraduates. We thank you for your commitment and dedication to students so they may successfully pursue careers in veterinary medicine, human medicine, or as research scientists.

Peter Zornes graduated from the neuroscience program in 2003 with the hope of one day becoming a physician. Tragically, his life was cut short in 2005. In his memory his family started the Peter A. Zornes Memorial Neuroscience Scholarship. Both his parents and his sister are WSU alumni. Each year a golf tournament is held to raise money to support neuroscience students.



2010 Zornes Scholarship recipient Omar Bayomy (left) with Dr. Bryan Slinker, Kathy Zornes, Joy Zornes, Tom Zornes, and Dr. Steve Simasko. Omar graduated in May 2012 and is currently attending Harvard Medical School.

Peter A. Zornes Memorial Neuroscience Scholarship Recipients

2008 Emiko Namatame

2009 Alexandra Bond

2010 Omar Bayomy

2011 Rachel Wanty

2012 Amanda Feeny and Matthew Landowski

The 6th Annual Zornes Golf Tournament will be held Saturday, June 22, 2013, in Colfax, Washington.

Your Gifts in Action

VMP Clinical Associate Professor Awarded the First Ed McLeary Distinguished Professorship

Dr. Kevin Snekvik, clinical associate professor in the Department of Veterinary Microbiology and Pathology (VMP), has been named the first Ed McLeary Distinguished Professor in Aquatic Health. The Ed McLeary Distinguished Professorship enhances WSU programs in fish health research, diagnostics, certification, and graduate education. Snekvik, DVM, Ph.D., is a diplomate of the American College of Veterinary Pathologists and the Aquatic Animal Health section head for the Washington Animal Disease Diagnostic Laboratory (WADDL).

"It is an honor to be recognized in this way," said Dr. Snekvik, who specializes in veterinary pathology and fish infectious disease. "This award not only recognizes the role we have played in ensuring fish health, but also highlights the need for the fish health program to expand its current fish disease research and to establish the training of the next generation of fish disease experts."

The fish health program, a collaborative effort between the VMP and WADDL, was created 15 years ago to independently confirm the fish health status at aquaculture facilities in Washington for export out of the state. Since that time the program has expanded to include certification testing and disease diagnosis in freshwater and marine facilities throughout the western United States. Dr. Snekvik and his staff also work with state, national, and international regulators to ensure the timely interstate and international movement of aquaculture products.

"Based on the current needs of the regional aquaculture producers, the awarded funds from the Ed McLeary Distinguished Professorship will be used to support the research and pathology training of graduate students and post-DVM ana-



Dr. Kevin Snekvik

tom pathology residents to better understand fish diseases and in turn enhance the health of fish," said Dr. Snekvik.

The Ed McLeary Distinguished Professorship in Aquatic Animal Health is a unified effort among Pacific Northwest aquaculture producers to ensure healthful fisheries that can compete in any of the world's marketplaces and contribute to enhanced sport fishing. Troutlodge, founded in 1945 by Ed McLeary and Ken Drew, pledged a lead gift to match dollar-for-dollar all gifts up to a total of \$250,000. This generosity established the Ed McLeary Distinguished Professorship in Aquatic Animal Health, a very prestigious professorship that positions WSU to become a national leader in this field.

"Kevin is a relatively junior faculty member, but he has taken on national responsibilities and serves in leadership positions on many national committees," said Dr. David Prieur, chair of the department. "His peers in the fish health arena value his knowledge, insights, and judgments."

To learn more about how your gift can make a difference please visit www.vetmed.wsu.edu/GiftsinAction.

Awards and Achievements



Donald Knowles, Animal Disease Research Unit (ARS-USDA) research leader and veterinary microbiology and pathology professor, was selected by the U.S. Secretary of Agriculture to receive an individual Secretary's Honor Award for "assisting rural communities to create prosperity so they are self sustaining, repopulating, and economically thriving." The Secretary's Honor Awards ceremony, sponsored by the USDA, was held September 12, 2012, in Washington, D.C. Dr. Knowles was also recognized by the USDA Chief Scientist and Under Secretary for the Research, Education, and Economics Mission Area.



Look for a WSU Alumni, Friends, and Students Gathering
at these Upcoming Events!

Mark your calendars

- November 1** Alumni Awards nomination deadline (www.vetmed.wsu.edu/Awards)
- December 2** Alumni reception at the American College of Veterinary Pathologists Conference, Seattle, Washington
- December 3** Alumni reception at the American Association of Equine Practitioners Conference, Anaheim, California
- February 18** Alumni reception at the Western Veterinary Conference, Las Vegas, Nevada
- April 13** Veterinary Teaching Hospital Open House in Pullman
- April 24-25** Golden ('63) and Diamond ('53) Grad Reunion in Pullman
- June 22** Peter Zornes Memorial Golf Tournament in Colfax, Washington
- June 28-29** CVM Class reunions ('73, '83, '93, '03) in Pullman
- July 22** Alumni reception at AVMA in Chicago

CE courses at WSU and online are offered year round; visit www.vetmed.wsu.edu/CE for more information.

For more information about upcoming events visit www.vetmed.wsu.edu/Events.