

CAAS MPH NEWSLETTER

APRIL 2023
VOLUME 4 ISSUE 4



Table of Contents

A Letter from Dean Vanderwall,
College of Veterinary Medicine 1-2

A Letter from Associate
Dean Cuomo, 3

Zoonotic Disease Corner, 4-6

Awards, 7-8

Spring 2023 Graduates, 9-12

Upcoming Events, 13

Social Media, 14



College of Agriculture & Applied Sciences
UtahStateUniversity

A LETTER FROM DEAN VANDERWALL

APRIL 2023

VOLUME 4 ISSUE 4

It is my pleasure to welcome you to this issue of the CAAS MPH Newsletter. In light of the fact that one of the degree options in the CAAS MPH Program is in Veterinary Public Health, I thought readers might be interested in learning about the past, present and future of veterinary medical education at USU. An initial effort to establish a Doctor of Veterinary Medicine (DVM) degree program occurred over 100 years ago when in 1907 the Board of Trustees, at what was then known as the Agricultural College of Utah (ACU), authorized the establishment of a DVM degree program. However, the proposed program was never formally established due to a Federal requirement that all DVM degree-granting programs have at least four graduate veterinarians on the faculty, which the ACU did not have at the time.* Therefore, that initial plan to establish a DVM program was abandoned and remained dormant for 70 years.

Subsequently in 1997, the prospect of establishing a School of Veterinary Medicine at USU was revisited, but it was determined that doing so was not economically feasible at that time. After an additional 14-year hiatus, in 2011 House Bill 57 was introduced and passed during the Utah Legislative session establishing a new School of Veterinary Medicine (SVM) at USU that would operate in partnership with the College of Veterinary Medicine at Washington State University (WSU) in Pullman, WA to deliver a joint DVM degree program. Notably, House Bill 57 was sponsored by then State Representative, Dr. John Mathis, a veterinarian who still practices in Vernal, UT. The two major drivers that led to the success of that legislative action were that it would: 1) increase opportunities for Utah residents to pursue their dream of becoming a veterinarian and 2) help meet the rising demand for veterinarians in Utah (discussed further below).

Through its partnership with WSU, the USU SVM became an integral member of the Washington-Idaho-Montana-Utah (WIMU) Regional Program in Veterinary Medicine. In that capacity, the SVM operates as a "2+2" program, in which 30 veterinary students/class complete the first two years of their veterinary medical training here in Logan, after which they move to Pullman to complete the remaining two years of the DVM degree program at WSU. Each class of 30 students has positions for 20 Utah residents and 10 nonresidents. The inaugural class of veterinary students enrolled in the fall of 2012, and received their DVM degrees in 2016. Since then, over 200 veterinarians have completed their education through the USU component of the WIMU Program. In addition to the role of the SVM in educating veterinarians, SVM faculty are integrally involved in the delivery of the CAAS Veterinary Public Health degree program.



A LETTER FROM DEAN VANDERWALL

APRIL 2023

VOLUME 4 ISSUE 4

In large part based upon the tremendous success of the current 2+2 program, last year during the 2022 Utah Legislative Session funding was approved to expand the SVM to a full 4-year DVM degree program through the creation of USU's ninth college, the College of Veterinary Medicine (CVM). Establishment of the new CVM will further expand opportunities for Utah residents to pursue a career as a veterinarian, and it will appreciably help meet the need for veterinarians in Utah, which is ranked 42nd in the number of veterinarians per capita. Once fully operational, the new CVM will double the number of positions for Utah residents to 40 with an additional 40 positions for nonresidents. To expand the class size, a new Veterinary Medical Education building will be constructed on the USU campus. Clinical instruction of students in the 4th-year of the curriculum will be conducted using a distributed, community-based private practice model, which precludes the need to build, staff and operate a full-service academic veterinary teaching hospital.

Importantly, USU WIMU veterinary graduates now reside-in and/or provide veterinary services in 22 of Utah's 29 counties, highlighting the positive impact the current program has had on the veterinary profession in the State, and that impact will grow considerably as a result of the formation of the new CVM. The USU CVM is currently pursuing accreditation through the American Veterinary Medical Association Council on Education (AVMA COE) with the goal of admitting its first class of students in the fall of 2025. Until then, USU will continue to participate in the WIMU program. If you would like further information about the USU CVM, please contact me at dirk.vanderwall@usu.edu.



Sincerely,

Dirk K. Vanderwall, DVM, PhD, Dipl. ACT
Interim Dean, College of Veterinary Medicine



College of Agriculture & Applied Sciences
UtahStateUniversity



A LETTER FROM DEAN CUOMO

APRIL 2023
VOLUME 4 ISSUE 4

It's April, the weather is (finally) warming, the days are longer and our thoughts turn to graduation! Congratulations to all that are graduating and beginning the next phase of their careers. One of the things I am most proud of in my work at USU is supporting what I call the promise of the Land Grant Mission. To me, the Land Grant Mission is about access to opportunity and meeting the needs of society, for all people. A fully online program like the USU Master of Public Health (MPH) exemplifies the Land Grant Mission. It provides access to exceptional education for people no matter where they live or where they are at in life. The careers that you take on with an MPH and the care you provide for people and animals will help fill great needs in communities and across society.

As the Associate Dean for Research and Graduate Studies in the College of Agriculture and Applied Sciences (CAAS), it is my goal to work with other college leaders, faculty, and graduate students to provide tools and streamline processes to ensure all graduate students have the opportunity to reach their potential. I am also invested in ensuring students have exceptional faculty advising. As such, one of my goals is to provide faculty with the tools that enable them to provide excellence in advising. Another one of my goals is for every graduate student in our college to have an excellent academic experience, one that prepares them for their next opportunities. As online students, your experiences are likely different from on campus students yet we want to ensure all students genuinely feel part of the Aggie Family and the CAAS family.



If you have thoughts you would like to share, or ideas for improving our online graduate programs, please reach out (greg.cuomo@usu.edu). I look forward to hearing about the excellent work you are doing to make your communities better for all.

Greg Cuomo
Associate Dean for Research and Graduate Studies
College of Agriculture and Applied Sciences
Utah State University

ZOONOTIC DISEASE CORNER

APRIL 2023

VOLUME 4 ISSUE 4

Spring is lambing and kidding season, the time to discuss zoonotic concerns related to abortions and stillbirths in sheep and goats. Unfortunately, many of the causes of abortion in sheep and goats can also affect human beings: in some cases, these infectious agents can cause problems specifically in pregnant women. I work as a veterinary diagnostician in the Utah Veterinary Diagnostic Laboratory, and this is a yearly, pressing concern for the safety of our staff at the laboratory, as well as for our clients and their families having abortion outbreaks in their goat, sheep, and even cattle herds and flocks.



Three important and highly contagious bacterial causes of abortion in sheep and goats are *Campylobacter* spp., *Chlamydophila* spp., and *Coxiella burnetii*. All can cause late term abortions, stillborn lambs and kids, and the birth of weak lambs and kids, and may result in abortion storms where many or most of the ewes or does in the flock abort. The most common cause of abortion in sheep that I have seen in Utah over the years has been *Chlamydophila abortus*, also known as Enzootic Abortion of ewes. Ewes tend to abort in the last month of gestation and are usually not sick themselves. In both *Campylobacter* spp. abortions and *Chlamydophila* spp. abortions, vaccines are available and treatment of ewes with oxytetracycline or tetracycline should help reduce abortions during an outbreak.



ZOO NOTIC DISEASE CORNER

APRIL 2023

VOLUME 4 ISSUE 4

Another cause of abortions in small ruminants becoming more widespread is *Coxiella burnetii*, the causative agent of Q Fever. Q Fever, first described in Australia, was named Query (“Q”) Fever because the cause was unknown. *Coxiella burnetii* causes a variety of signs and symptoms in animals (e.g. small ruminants, cattle, cats, wildlife) and humans including fever, pneumonia, and vomiting, as well as reproductive disease such as abortions. The time and temperature to pasteurize milk (1450F for 30 minutes or 1610F for 15 seconds) was based on conditions needed to kill *Coxiella burnetii*, which can be spread by ingestion of raw milk as well as by aerosols and insect vectors. There is no vaccine available in this country for Q Fever.

As stated above, these 3 bacterial organisms are highly contagious and, most importantly, can cause serious disease in humans. Pregnant women should not work around ewes during lambing season because of the risk of contracting *Coxiella burnetii* or *Chlamydophila abortus*, both of which can cause abortions in humans. In addition, *Campylobacter jejuni* is one of the more common causes of enteric disease and diarrhea in humans. It is usually a food-borne infection but can also be acquired by contact with animals shedding the bacterium.

Other causes of ovine abortion in this country tend to be more sporadic and less likely to result in abortion storms. *Salmonella* spp. infections may result in abortions. Usually, in these cases, the ewes and does are clinically sick. *Salmonella* spp. can be transmitted to humans and may cause severe enteric disease in anyone but especially in immunosuppressed people. However, it is more common to acquire *Salmonella* spp. from contaminated food than from infected animals. *Listeria monocytogenes* may cause abortions in sheep and goats, and it is also a zoonotic infection. Pregnant women exposed to this bacterium may suffer severe reproductive effects such as abortion, stillborn babies, and babies born with brain deformities such as hydrocephalus. The more common route of exposure is through ingestion of contaminated food, but exposure to small ruminant abortion is a possible source. *Brucella ovis* is a common cause of reproductive disease in rams in the western states. It can also cause late-term abortions, stillbirths and weak lambs, but has NOT been shown to have high zoonotic potential.

ZOONOTIC DISEASE CORNER

APRIL 2023

VOLUME 4 ISSUE 4

An important cause of protozoal abortion in small ruminants is *Toxoplasma gondii*, more common in goats than sheep. This is another zoonotic infection of particular risk to pregnant women and immunosuppressed people. In pregnant women, it may cause abortion and birth defects. Exposure to cat feces is NOT the most frequent method of exposure for human beings (ingestion of undercooked meat is a more common source). Exposure to aborting ruminants is a possible source for humans. In sheep and goats, accidental ingestion of cat feces in the feed is a source of infection, as cats carry and shed the protozoa.

This is a sobering but crucial topic in our farming communities. Pregnant women should not be exposed to sheep or goats that have had or are having abortions. Losing young kids and lambs of valued animals is a financial and emotional loss. However, protecting pregnant women from the risk of serious infectious disease should be our number one priority during such abortion outbreaks. As an added precaution, cats and dogs and wild carnivores should not have access to aborted fetuses or placentas, as they may ingest infectious material and spread it. It is strongly recommended to remove all aborted materials from the premises as soon as possible.



Jane Kelly, DVM, MS, MPH, DACVPM, DACVM
Veterinary Diagnostician and Biologist
Clinical Professor

AWARDS

APRIL 2023

VOLUME 4 ISSUE 4

Dr. Mateja Savoie Roskos received the Utah Academy of Nutrition and Dietetics (UAND) Award of Merit. The purpose of this award is to recognize a dietitian who has demonstrated leadership and made significant contribution to the profession of dietetics.

Mateja is the Associate Dean for Academic Programs and Student Services for the College of Agriculture and Applied Sciences at Utah State University (USU). She is also an Associate Professor and the director of the Master of Public Health Nutrition (MPH) program in the Department of Nutrition, Dietetics and Food Sciences at USU.



In her 10+ year career at USU, she has taught a wide range of undergraduate and graduate courses in dietetics, public health, and nutrition science. During this time, she has mentored hundreds of students who have ended up as health professionals across Utah, the Mountain West, and beyond. Mateja also mentors many practicing dietitians across the state who decided to pursue USU's online MPH Nutrition program. Mateja is very passionate about ensuring that working dietitians have an avenue for graduate education if they so desire. In addition to teaching and mentoring, Mateja focuses her research on farmers' market incentives, food insecurity, nutrition education, gardening interventions, motivational interviewing, and other areas in public health nutrition. Mateja has also been extensively involved with professional organizations such as UAND, the Academy of Nutrition and Dietetics, and the Society for Nutrition Education and Behavior. In her free time, she enjoys being outside with her husband, two daughters, and two dogs.



AWARDS

APRIL 2023

VOLUME 4 ISSUE 4

Kylie Peterson was awarded the 2023 Utah Academy of Nutrition and Dietetics Emerging Dietetics Leader Award. The purpose of this award is to recognize the competence and activities of dietitians, regardless of age, who have made distinctive contributions early in their dietetics careers.



Kylie is a clinical dietitian and diabetes educator at Intermountain Layton Hospital. Prior to that she was a Nutrition & Food Service Manager and a clinical dietitian/diabetes educator at Intermountain Cassia Regional Hospital. Kylie's leadership has been essential for the implementation and improvements of a wide range of programs and support services for patients, caregivers, and employees. In her current role, Kylie develops and implements various diabetes education programs for patients/caregivers, translates diabetes education materials into Spanish to better serve her clients, provides one-on-one counseling to clients, and much more. In past positions, Kylie assisted with accreditation of a weight loss program, managed and trained team members, and used innovative ways to reduce food waste and increase clinical outpatient volume. In addition to her work experience, Kylie is a graduate student in the Master of Public Health (MPH) Nutrition program at Utah State University and is expected to graduate in December of 2023. Kylie has served as a volunteer in many dietetics related organizations including serving as the secretary of UAND from 2020-2022. It is obvious that Kylie has made distinctive contributions early on in her dietetics career. She has a genuine love for the profession and the health and well-being of her community.



SPRING 2023 GRADUATES

APRIL 2023

VOLUME 4 ISSUE 4

Ashley Sheesley

After graduating with my degree in Animal, Dairy, and Veterinary Sciences at USU, I joined USU's Institute for Antiviral Research (IAR) working with viruses like influenza viruses, zika virus, enteroviruses, and--when the pandemic started--coronaviruses including SARS-CoV-2. Once COVID-19 was declared a pandemic, I decided to get a Masters of Veterinary Public Health so I could continue to studying infectious diseases both at the IAR and through a public health lens. I'm especially interested in zoonotic diseases and One Health. I chose to go the thesis route for my MPH. For my thesis, I compared the major variants of SARS-CoV-2 in transgenic mice that have the human receptor SARS-CoV-2 uses to enter our cells. I hope to pursue a career that keeps me under the umbrella of infectious diseases. Whether that's with a public health virology lab, a zoonotic diseases epidemiologist, or something else entirely, I'm excited to see what comes next!



Catherine Karnatz

My time in USU's MPH program has been an extremely valuable experience for me both personally and professionally. Advancing my education challenged my thinking and deepened my understanding of so many areas of public health. I feel excited and inspired to act as a leader in the field and contribute to bettering the health outcomes of the communities I'll serve. In the next few months I'll be moving to Rhode Island with my fiancé and our cat and looking for a new job. I'm really looking forward to starting this new chapter and exploring more of the east coast!



SPRING 2023 GRADUATES

APRIL 2023
VOLUME 4 ISSUE 4

Allie McLeod

Being a part of the MPH program at USU has been very rewarding. Pursuing my MPH while continuing to work in patient care allows me to make real-time connections with what I learn in class and what I do in my field, giving more meaning to my work with my patients and with my team. The knowledge I have gained from my MPH courses has empowered me to recognize, understand, and speak with confidence about system-wide issues within my organization. I am grateful to be earning my MPH and look forward to the opportunities it will provide to be a leader and to maximize my reach in helping others. After graduation, I plan to continue in my role as an outpatient dietitian and further develop a specialty in eating disorder care.



Sarah Terry

My MPH program prepared me greatly for my professional career. I am so glad I decided to continue on with my pursuits of getting a MPH at USU. I truly feel fulfilled in all aspects of my life. I have to thank my husband and daughter, because without them, I wouldn't be able to do any of this (I love you so much, Dallas and Sigur!) Currently, I am a community health educator at the Weber Morgan Health Department. I am in charge of our Diabetes and Hypertension objectives in our Healthy Environments and Active Living grant. Currently, I am working on implementing a diabetes prevention program at the health department and constructing a chronic kidney disease course for people with diabetes. I love working close to home, helping my community, and best of all- my daughter gets to see that she can do whatever she wants in life!

SPRING 2023 GRADUATES

APRIL 2023

VOLUME 4 ISSUE 4

Elaine Dawson

I greatly enjoyed my time in the MPH program, it has taught me so many valuable life lessons and has influenced how I view the world. The structure of the program nurtures self discipline and independent thinking as well as allowing students to work on individual skill building, which for me was public speaking. I came out of this program with the ability to analyze different public health issues both analytically, and socially, I will continue use these skills in both my professional and personal endeavors. Thanks to this program I discovered my passion for epidemiology and now know that I want to pursue this passion. I will be applying to vet school this round with the hopes of becoming a veterinary epidemiologist.



Fiona LoCicero

The MPH program has being such a wonderful and extraordinary experience for me. All my teachers were exceptional, reliable, knowledgeable and always ready to run the extra mile to help me to reach my goals during the program. As far as today, I am waiting to hear back about a new position I applied for after enhancing my education through the MPH program. Also, I'm going to Denmark in the summer to see if I can learn a little bit more about public health in the Nordics countries, since most of my work health experience has being in Guatemala and United States with minority communities. I feel so very grateful with all the knowledge I was able to gain during the program and all the opportunities ahead!

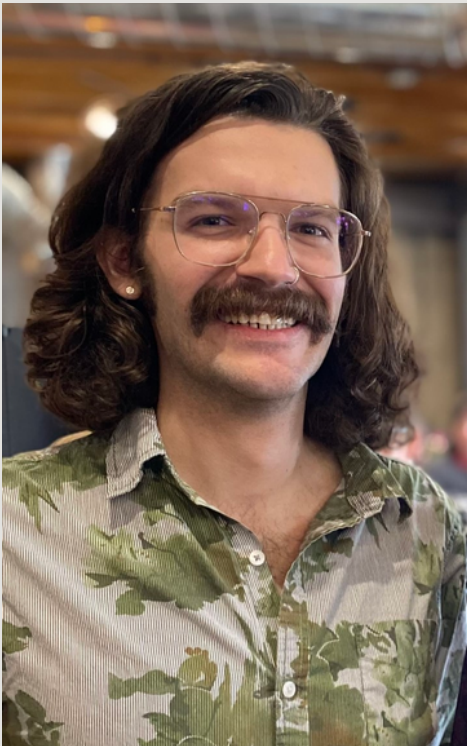
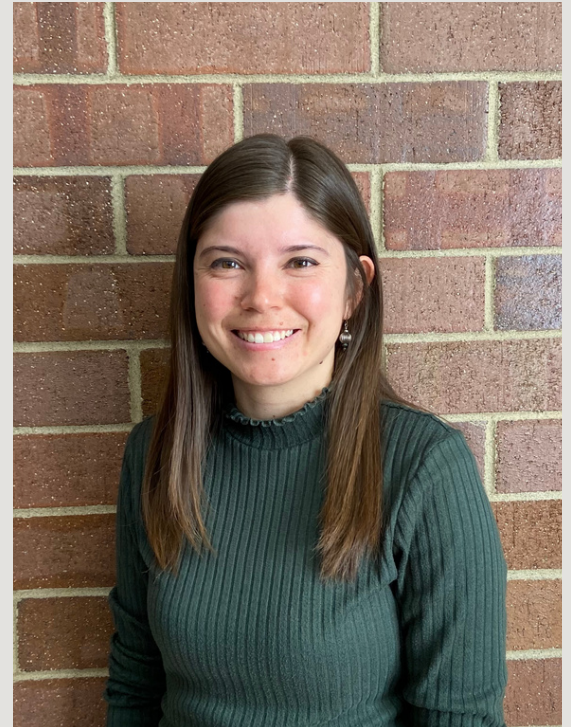


SPRING 2023 GRADUATES

APRIL 2023
VOLUME 4 ISSUE 4

Stephanie Ensign

I am excited to be graduating with my Master's in Public Health. The MPH program rekindled my love for school, and I am grateful for the wonderful professors and peers that I've worked with and interacted with during my time in the program. I am ready to relax for a bit after graduating and getting to read all the books that I've had to put off for the last two years or so. I am also hoping to start biking again this summer and going on some fun hikes. I've worked as a registered dietitian for the last 9 years, mainly in school nutrition. Currently I am working as a Child Nutrition Specialist at the Utah State Board of Education and am loving it. Right now I have no plans to switch careers, but I am excited for the opportunities that having my MPH will give me in the future.



Jacob Terry

I started this program in the Fall of 2020 after graduating with my undergraduate degree from USU that spring. I've enjoyed it and really loved all the experience and knowledge I've gained from this program. I'm currently working on prospective cancer studies with Intermountain Health as a research coordinator. My plans post-graduation are to find a job in my field of study or maybe take some time off and travel/relax. In the future, I'll probably pursue a PhD but for the time being, I plan on just working and enjoying life without school for a moment.

... and more!