Reinventing Veterinary Education
1. Why reinvent veterinary education?
Our system for educating doctors of veterinary medicine (DVM) is broken. It is too expensive, takes too long and focuses on processes rather than outcomes. Like all health fields, today we need high EQ leaders who can work as team members equipped with the knowledge and skills for commerce, not just the technical knowledge and skills of medicine and surgery. Arizonans graduating as DVMs today have debts of up to $350,000. With the average starting salary for companion animal practice at roughly $69,000, it will take many decades to pay off their student loans; they may never qualify for a house mortgage. Furthermore, there are many industries where DVMs are badly needed, but there are not enough of them, trained in such a way, that can fill these jobs.

2. Why the University of Arizona and why now?
The UA is Arizona’s land-grant University. It’s our job to educate students at costs consistent with the industries served. We should enhance the private sector and not compete with it. The College of Agriculture & Life Sciences has excellent facilities Arizona-wide that we will use even more effectively with this program. We’re going to leverage all our college’s existing resources with world-class faculty, and work with all of the other UA health colleges, to offer students a DVM at far less cost to them, and faster, than any other U.S. vet school.

3. What excites you the most about this program?
I am most excited about providing a clear and exciting future for all our students, whether or not they eventually graduate as a DVM. This isn’t the case anywhere else. Right now students apply to vet school and if they don’t get admitted there is no clear path to success. We are going to change this paradigm of failure and waste by providing a master’s degree in animal and biomedical industries to all students who get the grades after the first selective year. This master’s degree will cover three pillars of knowledge that are foundational for success in all animal and biomedical industries: commerce, human-animal interdependence, and One Health. One Health is a worldwide strategy for the global health of humans, other animals and the environment. The MS and DVM degree will give our students a competitive edge in the market place.

4. Why is private support vital?
Our program is focused on outcomes for the private sector. Arizona’s national lead in reductions in state education support (with accompanying increases in tuition) means that funding this transformational program requires revolutionary business approaches. Lack of funding from the legislature has resulted in the program being wholly dependent on tuition and private sector support. We have no choice but to turn to our alumni, other supporters and the business community. Doing so, however, requires new levels of accountability from us. All gifts, large or small, will help us address the critical need for public veterinary education in Arizona—education that will improve the health and economies of all Arizona’s communities, boost our state and national economy, promote public health and food security, and ensure that Arizonans can realize their dreams without crippling debt.

Make a Gift Today!
Please invest in this exciting venture by making a generous gift. For more information, please contact Jim Davis, Senior Director of Development, at 520-626-7995 or jdavis@cals.arizona.edu.
Three Pillars of Knowledge - The Foundation for Success

The new Marley Veterinary Medical and Surgical Program will be built on three pillars: Human and Animal Interdependence, One Health, and Commerce. These pillars will deliver a well-rounded curriculum that includes non-traditional veterinary medical areas providing students competencies to work in veterinary practices and a wide variety of jobs, from mixed animal practice, to humane societies, fish farms, government, corporations, and international veterinary practice.

I. Human and Animal Interdependence
Human and Animal Interdependence (HAI) refers to the connection between humans and animals, wild or domestic, and how they are intimately linked with respect to each other’s physical and mental health and well-being. HAI goes beyond pets and their owners and includes, but is not limited to, animals’ roles in commerce, food production, entertainment, recreation, the environment, research, the military, human disaster recovery, as service animals for people, and in religious and cultural traditions.

II. One Health
The One Health concept evolved from the realization that human, animal and environmental health are inextricably connected. For example, experts say that bats are the likely source of the deadly virus that caused the Ebola crisis. The fact is, over 70% of all human infectious diseases come from animals and are impacted by manmade and natural changes occurring in our shared ecosystems.

One Health is the belief that scientists, health care professionals, ecologists, veterinarians and many other disciplines must work together to promote optimal health for all species: humans, domestic animals, wildlife, plants and the environment.

III. Commerce
Commerce is important for veterinarians to understand because we are now in a worldwide economy. It refers to the social dealings between people as it relates to the legal, economic, political, social, cultural and technological transactions on both the local and global scales.

Commerce is an aspect of veterinary education not often taught in most veterinary schools. Therefore our students will know how to be successful in small veterinary practices to entrepreneurial businesses to large corporations that hire veterinarians to improve to human, animal, and global health.
Plans for obtaining and updating facilities in the Tucson area for the UA Marley Veterinary Medical and Surgical Program are underway. These facilities will be used to train veterinary students in their second and third years of the program. Skills obtained at these facilities will be necessary for students to move into the fourth year of the program where they will perform 48 weeks of clinical rotations in satellite facilities, private practices and related industries around the state.

Students will gain experience with farm animals at the UA Agricultural Research Center, located at Roger Road and Campbell Avenue, five miles north of main campus in Tucson. The property houses the Food Product and Safety Laboratory, the Equine Center, and the Agricultural Research Center (pictured above), as well as areas for housing and grazing livestock animals. Currently unused space within the state-of-the-art research center will be converted to house a farm animal anatomy and simulation laboratory, animal clinical examination areas, and a collaborative teaching space.

For work with companion animals, a 27,464 square-foot off-campus building is being refurbished. The facility is already equipped with large chemistry and biology research labs, offices and conference rooms. GLHN Architects and Engineers, Inc. is working with the UA program to adapt the laboratory space for anatomy and simulated models areas, surgery suites and clinical examination rooms.

Facilities Planned for Vet Med Program
The Steele Foundation has awarded the 45-acre DK Ranch in Cornville to the University of Arizona, providing the university with a permanent footprint in Northern Arizona. The UA College of Agriculture and Life Sciences will use the property for the newly established Veterinary Medical and Surgical Program among other programs.

The University of Arizona was chosen in part because of its existing partnerships within the Verde Valley and a desire for the property to remain agriculturally focused. In addition to working with Yavapai College, the university has expressed interest in developing working relationships through programs housed at the DK Ranch with Northern Arizona wineries and the Arizona Wine Growers Association.

“Our schools and departments will utilize DK Ranch to complement existing programs at the UA and to create new ones specifically related to the region,” said Shane Burgess, Vice President of Veterinary Sciences and Cooperative Extension and Dean of the UA College of Agriculture & Life Sciences. “The DK Ranch allows us to offer experiential learning and research opportunities to our students, and to those attending Yavapai College, providing unparalleled access to state-of-the art facilities, while also promoting a seamless transition for these students into the UA program following their associate’s curriculum. UA is investing in the future of Arizona’s economy by investing in the Verde Valley.”

“The extended commitment that the University of Arizona has made to the community is wide-reaching and incredibly valuable on many levels,” said Marianne Cracchiolo Mago, President of The Steele Foundation. “We are confident that the DK Ranch is in great hands and believe that our mission and spirit of helping others will be upheld with this gift. The College of Agriculture and Life Sciences is poised to break barriers in the field of agriculture and we look forward to a continued partnership with the University of Arizona.”

The opportunity opens up the ability for the UA to better provide statewide support and leadership in key areas of education and research such as human and animal health, biomedical sciences, sustainable natural resource management and agricultural education.

With the addition of the DK Ranch to the school’s property portfolio, the university has determined that every student in the Veterinary Medical and Surgical Program – the state’s only public program to date – will be able to live on the property for at least six weeks to complete rotations on ranch management, riparian ecosystems, wildlife medicine and management, sustainable land and water management practices, human resources management, community relations, ranch economics, human-animal interdependence, welfare and well-being, and public health issues.
The College of Agriculture was the first academic unit of the University of Arizona and in 1915 the impressive new Forbes Building (originally Agricultural Hall) was the pride of the College. The departments within it consisted of Animal Husbandry, Agricultural Chemistry, Agronomy, Horticulture, Plant Breeding, Home Economics and Agricultural Extension and they formed the basic structure that still prevails: teaching, research, and extension.

100 years later, the current College of Agriculture and Life Sciences houses six departments and four separate schools and offers 36 degrees for almost 3500 students.

In December 2014, construction began on updating the first floor of the Forbes building and was completed in Summer 2015. While modernizing the spaces within the first floor, care has been taken to highlight the building’s architecture and retain its classic features, including the original high ceiling and cornices. The remodeled space will support interaction and relationship building among students, alumni and faculty as well as house the CALS Career Center.

The Forbes project was fully funded and made possible by 70 donations from alumni and friends.

To celebrate the 100th anniversary of the Forbes Building, a Lobby and Career Center Dedication will be held Saturday, October 10, 2015 at 10:00 a.m. The public is welcome and encouraged to attend. For more information contact Laura White, lwhite@email.arizona.edu.
Preparing Students To Graduate With a Job, Not Just a Degree

The new Gary & Barbara Pasquinelli Career Center is the centerpiece of the Forbes renovation project, with the ultimate goal of preparing students for productive careers and graduating with a job, not just a degree. The Center offers interview rooms, a corporate-style boardroom and professional staff with on-site offices to serve the needs of students.

Student Services
Career Center staff work with students one-on-one to discuss career options and review resumes, and they host seminars for students to develop essential career skills. In addition to these services, the staff curates the CALS Internship Library, which is available for all CALS Students to access, and administers the CALS Internship Survey that allows students to self-identify as actively seeking internships so that they will receive targeted email opportunities.

Employer Opportunities
In addition to the services offered to students, the Career Center hosts information sessions with employers which foster students’ face to face interaction with representatives from industry. The goal is to be the initial point of contact for industry representatives seeking interns or full-time employees. Resources related to best practices in hiring college students and developing internship programs are also available through the CALS Career Center. Center staff members organize classroom visits, table events and provide informational networking evenings for employers.

Throughout the fall semester, CALS Career and Academic Services will be hosting events for students to experience and utilize the newly renovated lobby. Events will include career skills seminars, ask the interviewer days and internship showcases. All of the events will be listed on the Career and Academic Services events calendar (cals.arizona.edu/cas).

Alumni are welcome to stop by and visit the Center. All CALS Alumni are encouraged to join the UA CALS Career Center group on LinkedIn. This group is a great way to stay informed about Center activities as well as learn about possible positions for CALS outstanding alumni.
In 2012, the Kemper and Ethel Marley Foundation recognized ranching's central importance to Arizona and demonstrated its commitment to the state's rangelands and the University of Arizona's research and extension program through a $4.5 million dollar endowed gift. The Marley Foundation's generous contribution was divided into two components; $1.5 million, which was invested to support the Marley Endowed Chair for Sustainable Rangeland Stewardship, and another $3 million to establish the Marley Program Endowment.

The first recipient of the Marley Endowed Chair, George Ruyle, is a professor and extension specialist in the Rangeland and Ecology Management Program housed in the School of Natural Resources and the Environment. As Chair he has received support to further his teaching, research, extension and community outreach in service to Arizona's ranchers and rural communities. The Endowment provides additional funding for increased rangeland monitoring, technical support, graduate student positions in the Rangeland Ecology and Management Program and critical program operations.

When asked about the importance of the Marley Endowment, Dr. Ruyle stated, “The endowment is about supporting and maintaining forever a strong link between CALS campus programming, the ranching industry and rural community vitality in Arizona. It has raised the profile of these efforts in the University and the state at a critical time.”

“Ranching families and rural communities have never needed this kind of support more.”

Arizona ranchers are already reaping benefits from the direct link to CALS. The endowment offers the freedom to respond quickly to emerging ranching issues. Recently, Dr. Ruyle was able to act quickly on the listing of the New Mexico meadow jumping mouse as an endangered species under the federal Endangered Species Act. This listing will impact Arizona and New Mexico ranchers and has created a need to develop habitat assessment and monitoring protocols on Forest Service grazing allotments.

The endowment also offers opportunities for young faculty and graduate students to work on projects that might traditionally be overlooked for funding but that have the potential to make an impact on Arizona ranchers. One such project, from the US Fish and Wildlife Services (USFWS), is the development of a program to collect rancher and landowner perspectives on jaguar habitat conservation and potentially create a process that would pay for improvements to ranch infrastructure.

As part of the endowment, an industry advisory board comprised of three Arizona ranchers and the CALS Dean, meet with Dr. Ruyle twice a year to provide input on current programming and assist in identifying emerging issues. Jim Webb, a member of the advisory board who was instrumental in securing the Marley Endowed Chair for Sustainable Rangeland Stewardship, says, "Dr. Ruyle has already had a tremendous impact on the ranchers in Arizona through his personal involvement and his commitment to providing them rangeland management education in the field. His utilization of the Marley Chair is a great example of what makes these types of endowments worthwhile to the donors and to the University."

When asked what the endowment means for the Arizona ranching community Dr. Ruyle says, “This endowment provides much needed support for the ranching industry and increases the capacity of rural communities to chart their own destiny in the cultural, economic and ecological conditions of their society.” He goes on to say, “Ranching families and rural communities have never needed this kind of support more. The challenges faced require such an endowment and perpetual support from the UA.”
Stephen A. Martori has been awarded the 2015 CALS Alumnus of the Year Award, in recognition of his outstanding achievements and his support of the College and Arizona agriculture. Steve is the owner, managing member and CEO of Martori Farms (also known as Eagle Produce), a third-generation family business in Scottsdale, Arizona. Martori Farms is the largest commercial agricultural company in Arizona specializing in fresh melons and broccoli.

Steve and his family have been leaders and innovators in the fresh produce industry and have provided significant contributions to the technological side, as well as the processing side, of the business. Such innovations include extending the shelf life of fresh cut produce, expanding distribution, improving sanitation and reducing bacteria levels. The work of Martori Farms has changed the way the industry sanitizes fruit today.

Steve earned his Bachelor of Science in Agricultural Business Management and Economics from the University of Arizona. He has been a member of the College of Agriculture and Life Sciences Ag 100 Council since 1994 and was recognized in 2013 as the AG 100 Agriculturist of the Year. In furthering his commitment to CALS and the UA, Steve recently made a major contribution to be part of the College of Agriculture and Life Sciences’ Forbes Building renovation by naming the Career Center Board Room. This will directly impact the dean’s vision of every student getting a job, not just a degree.
Meet CALS Development, Alumni & Advocacy Team

Our office is proud to serve as a resource and information center for the UA College of Agriculture and Life Sciences. We have three key roles: cultivating long-term relationships with alumni, friends and supporters, securing additional resources to support the dean's strategic development objectives and actively communicating with our alumni and friends to support the College’s legislative priorities.

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IN MEMORIUM

Beryl J. Burt
April 5, 2015. Beryl’s 33-year career in 4-H included positions as County Agent, State Specialist and State Rural Development Program Leader at the University of Arizona.

Jimmye S. Hillman
June 4, 2015. Jimmye was a long-time professor at the University of Arizona, one of the most influential international economists of his generation, and, late in life, a literary memoirist.

Carlene Huesgen
April 16, 2015. Carlene worked for the University of Arizona in the departments of Classics and then Agriculture and was the staff supervisor at Pima County Cooperative Extension until she retired in 1999.

Dr. Glen Michael Miller
July 24, 2015. Glenn graduated from the University of Arizona in 1969 and for many years taught undergraduate and graduate classes in Agricultural Education at CALS. His legacy lies with the many educators he helped train who take his passion for agriculture into their classrooms every day.

Isabell Rousseau Pendergast
December 3, 2014. Isabell received her Bachelor’s degree in Nutrition at the University of Arizona. She always loved the "University" as she called it and all three of her sons and three of her grandchildren followed in her footsteps.

Stephen Morris Pierce, II
March 21, 2015. Steve grew up on Las Vegas Ranch, one of Arizona’s last great cattle ranches northwest of Prescott. He studied computer information and decision systems and started his own online-gaming company.

Raphael (Rafe) D. Sagarin
May 28, 2015. Rafe was a marine ecologist at the Institute of the Environment, University of Arizona and Biosphere 2, where he led the Ocean Project. He is best known for his work on applying the lessons of evolutionary adaptation to national security and peace and conflict issues.

Edward (Eddie) Thomas Sheehan
November 17, 2014. Eddie was a compassionate educator and academic counselor to many students in his 37 years of teaching at the University of Arizona in the College of Agriculture.

John Stair
April 21, 2015. John was an environmentalist and educator for over 50 years, working at the Arizona Game & Fish Department and the University of Arizona as Extension Specialist in the then School of Renewable Natural Resources.

Werner S. Zimmt, PhD
September 12, 2014. Werner was a volunteer with the Arizona State Museum, where he utilized his Masters in Archaeology to preserve & restore Native artifacts. In 1991, he became an adjunct professor in the University of Arizona Dept. of Agricultural & Biosystems Engineering.