

## School of Animal and Comparative Biomedical Sciences 2021 STRATEGIC PLAN

**Overview:** The School of Animal and Comparative Biomedical Sciences (CABS) brings together animal scientists, veterinarians, microbiologists and others to offer the strongest possible programs in research, education and outreach. This school was formed in order to offer more integrated research and educational opportunities in the animal and biomedical sciences.

**Purpose:**

- To provide and promote education, research, extension and service in the animal, veterinary, and microbiological sciences
- To provide support and leadership in Arizona in the areas of biomedical sciences in the areas of Animal health and disease and to integrate these objectives with the broader goal of improving human health

**2021 Vision:**

**Education:**

- Enhancing curriculum and “hands-on” instruction whereby students served by our school can be the most competitive and prepared in their respective industries
- Creation of a ‘One-Health’ Professional Veterinary Degree Program

**Research:**

- A vibrant research community that seamlessly integrates findings across the spectrum of animal and human health and disease
- Provide research findings that can be applied to improve and increase production efficiency
- Conduct research that can be translated to drive the advancement of applied biomedical science

**Service/Extension:**

- Continue to provide leadership and education to animal agriculture
- Extension programs that convey the findings from our research to communities
- Enhance our diagnostic capabilities
- Continue to grow the areas of food products and food safety

**Mission:**

- To serve society by delivery of quality education programs to students and the general public
- Engage in basic and applied research
- Provide leadership through extension, outreach and service activities

**Shared Values:** We value

- Promoting health in animals and humans (“One Health”)
- Delivery of effective educational programing
- Creating and maintaining research programs that meet the needs of the community
- Generating financial resources
- Collegiality

**STRATEGIC GOAL ONE: Enhance food safety education and research through development of a food safety center**

**A. Current situation and gap between current situation and desired situation**

Many job opportunities exist for students trained in food safety. Several faculty members are involved in research of current Food Safety issues focused upon by several funding agencies. In 2012, The Food Safety Consortium hosted its third annual meeting which involved faculty, students, industry partners and government agencies. This Consortium was well received. Additional collaborative and extension food safety programs are in place and gaining some prominence. However, currently there is an inadequate ability to fully train undergraduate or graduate students in the Food Safety area. This is due, in part, to a lack of facilities, equipment, funding, and/or faculty in the field.

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop the Southwest Food Safety Center of Excellence that encompasses the Current Food Safety Consortium faculty and resources and allows for greater investment in facilities, equipment, and faculty to effectively meet outreach, teaching and research goals.
- Intensify consumer education through outreach programs that target food safety issues
- Provide HACCP certification for small businesses and retail outlets
- Seek additional industry collaboration and funding
- Develop partnerships with the fresh produce growers in Yuma, AZ
- Develop international training program
- Beginning of collaboration with culinary groups to intensify food safety training (Pima CC, Tucson Culinary Arts)

**C. Actions and Time Period (Fiscal Years)**

- |  |               |
|--|---------------|
| • Intensify work with Public Health Officials          | FY2013-FY2014 |
| • Develop Southwest Food Safety Center of Excellence   | FY2013-FY2014 |
| • Increase participation and funding from Industry     | FY2013-FY2021 |
| • Start a Graduate Program in Food Safety Sciences     | FY2014-FY2015 |
| • Create an associated Food Safety Degree Program      | FY2014-FY2015 |
| • Strategic hire for Food Safety teaching and research | FY2014-FY2015 |
| • Add more Food Safety focused classes                 | FY2014-FY2016 |
| • Continue to seek funding from government agencies    | FY2013-FY2021 |

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Investment in faculty and equipment for food safety related research
- Development of new faculty in food safety field
- Expanded facilities, and increased collaboration with existing facilities including the Agricultural Facilities both on campus and in Yuma

**E. Objective metrics that will be used to track progress towards attaining goal**

- Development of food safety center with research, teaching, and outreach aims
- Graduate and undergraduate student enrollment
- Research Funding
- Publications
- Industry participation and collaboration in food safety research
- Utilization of facilities and equipment for food safety research
- Number of hits on the website

**Notes (if any)**

**STRATEGIC GOAL TWO: Maintain and strengthen the Environmental Biology Program (Physiology, Nutrition, Reproduction/Perinatal Environment) that utilizes the unique facilities at the ARC**

**A. Current situation and gap between current situation and desired situation**

Currently, a strong program and faculty is limited by an under-developed facility. There has been loss of faculty due to limited resources. We have 1 senior faculty and 2 new junior faculty members who study different aspects of nutrition. The recent hire of an extension beef person trained in nutrition provides a critical mass for integrated research in nutrition. There is a strong interest/expertise in areas that are priorities of funding agencies such as:

- Impact of global warming/Adaptation to hot environments
- Obesity
- Effect on intra-uterine growth
- Pre- and Peri-natal programming
- Control of feed/food intake

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop a physical plan to complete facilities to best meet the need of current and future faculty
- Raise money through grants/gifts
- Form a Center for the Study of Global Warming Impacts on Domestic Animals including members from Agricultural and Biosystems Engineering, Animal and Comparative Biomedical Sciences, Agricultural Economics, and Soil and Natural Resources
- Form a Center for the Study of Obesity including members from Animal and Comparative Biomedical Sciences, Nutrition, Physiology, and the Norton School of Family and Consumer Sciences.

**C. Actions and Time Period (Fiscal Years)**

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|--|---------------|
| • Complete blueprint for new facilities at ARC                               | FY2013-FY2014 |
| • Develop Center for the Study of Global Warming Impacts on Domestic Animals | FY2013-FY2015 |
| • Develop Center for the Study of Obesity                                    | FY2013-FY2015 |
| • Fundraising for existing and new ARC facilities                            | FY2013-FY2016 |
| • Construction of New Facilities at ARC                                      | FY2014-FY2016 |

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Leadership
- Plans from faculty teams that share common research, teaching, and extension goals in nutrition, reproduction, environmental physiology, and food safety
- Funding

**E. Objective metrics that will be used to track progress towards attaining goal**

- Blueprints for new facilities
- Centers Established
- Faculty teams formed
- Publications
- Grant Funding
- Graduate student quality and quantity
- Funding benchmarks
- Building completion

**Notes (if any)**

**STRATEGIC GOAL THREE: Strengthen and Support Existing Genomics and Bio-Informatics Endeavors**

**A. Current situation and gap between current situation and desired situation**

There are opportunities for faculty in the school to expand their research programs by incorporating elements of bio-informatics and/or genomics. This is an opportunity that is not being met due to problems with access. There is also the need for undergraduate and graduate training in bio-informatics so that students have the skills necessary to access the future job markets.

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop Bioinformatics courses for graduate and undergraduate students
- Provide outreach and training for faculty and postdoctoral fellows within the school
- Provide cyberinfrastructure for the school personnel to acquire, manage, analyze and visualize large genomics data sets. This may be provided at a departmental, college or institute level and should include leveraging links with existing campus initiatives.

**C. Actions and Time Period (Fiscal Years)**

- |  |              |
|--|--------------|
| • Add undergraduate and graduate genomics/bioinformatics course                | FY 2013-2014 |
| • Increase awareness of existing cyber infrastructure and identify unmet needs | FY 2013-2015 |
| • Provide training workshops for interested faculty and postdoctoral fellows   | FY 2014-2021 |

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Faculty and TA time commitment to developing new course work
- Access to training opportunities (including registration, travel costs)
- Strengthen links to UA core genomics facilities (such as CGC, BIO5)
- Access to data storage and analytics

**E. Objective metrics that will be used to track progress towards attaining goal**

- Number of grant submissions with bio-informatics/genomics components
- Number of our school student's that complete bio-informatics training
- Number of faculty and postdoctoral fellows attending new training opportunities
- Increase in high throughput data submissions to public repositories

**Notes (if any)**

## **STRATEGIC GOAL FOUR: Maintain and Strengthen Reproductive Physiology Discipline In Animals and Humans**

### **A. Current situation and gap between current situation and desired situation**

The Animal Scientists of the school are working to develop a leading teaching and research resource in Reproductive Biology at the UA. Recent hires in this area provide expertise in follicular development (Craig), luteal physiology (Bogan), and neuroendocrinology (Renquist). The school houses established programs in fetal physiology, endocrinology, and pathophysiology (Limesand) and applied equine reproduction techniques and breeding management (Arns).

### **B. Strategy/ies to achieve goal (list if more than one)**

- Form a research program (or center) designed to improve animal and human reproduction
- The newly formed team of researchers will capitalize on individual researcher interests and expertise to address current issues in female reproduction performance, environmental limitations (e.g. heat stress and toxicology), and human health complications associated with sexual dimorphism
- An additional faculty member in male reproduction will complete the currently assembled team's expertise and be able to interact with Dr. Sheldon Marks at the International Center for Vasectomy Reversal.
- Creation of the reproductive program will provide mentoring to young scientists and form collaborations that benefit basic research, undergraduate and graduate training, and production management for both established and new faculty
- Complete facilities at Agricultural Research Center that support basic research in animal models for reproduction and pregnancy (sheep)
- Ensure that new hires in reproductive physiology, and other aspects of basic science disciplines, add new expertise that compliments new and current research programs.
- Collectively the researchers will use sheep as an animal model for other livestock industries and human health, which will require a flock for both research and teaching purposes. This will need to be developed as a self-sustaining unit at the UA.
- Strengthen interactions with clinicians in Ob/Gyn at the UA – resident and fellowship training as well as translational research
- Strengthen interactions with academic programs: physiology, pharmacology, and BIO5

### **C. Actions and Time Period (Fiscal Years)**

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|---|----------------|
| • Develop research teams and global research goals        | FY 2013-2016   |
| • Establish Program/Center in Reproductive Biology        | FY 2013-2015   |
| • Develop facilities at ARC to accommodate research goals | FY 2014-FY2015 |

### **D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Cooperation amongst faculty to develop research projects that utilize the team's expertise
- Development of facilities
- Additional expertise in male reproduction, bioinformatics, statistical analysis, computational biology, and endocrinology

### **E. Objective metrics that will be used to track progress towards attaining goal**

- Grants (individual and multi PI funding from NIH, USDA, and private foundations)
- Generation of new knowledge that is presented as peer reviewed reports, but also translate in to increased animal fecundity and performance and improved women's health
- Collaborations with private and academic programs in UA, Tucson, and Arizona

### **Notes (if any)**

**STRATEGIC GOAL FIVE : Maintain Existing Unique Shrimp Pathology and Aquaculture Program**

**A. Current situation and gap between current situation and desired situation**

The current program has impressive ties to the industry and outstanding faculty and facilities in place. However, low faculty numbers limit course offerings and program longevity.

**B. Strategy/ies to achieve goal (list if more than one)**

- Increase awareness of current program features
- Encourage long term maintenance of existing facilities

**C. Actions and Time Period (Fiscal Years)**

- Continue existing course offerings and graduate study FY2013-2021
- Maintain industry collaboration and continue to seek outside funding opportunities FY2013-2021

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Continued faculty and administrative support

**E. Objective metrics that will be used to track progress towards attaining goal**

- Relevant course and graduate studies enrollment
- Research funding and publications

**Notes (if any)**

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**STRATEGIC GOAL SIX: Expand international focus of Race Track Industry Program (RTIP)**

**A. Current situation and gap between current situation and desired situation**

The RTIP is a unique program with international recognition. It sponsors a yearly Race Track Symposium that boasts about 18% international attendance. In addition, RTIP has both a successful graduate and undergraduate program and has produced hundreds of alumni who have gone out to work in the industry. In 2006 a master's degree program was started. The graduate program is currently limited due to resources and it could grow.

**B. Strategy/ies to achieve goal (list if more than one)**

- Increase attendance at the Global Symposium on Racing & Gaming by expanding our international focus
- Continue exchange programs with the 2 Irish Universities
- Maintain the Executive in Residence Program
- Develop distant learning courses with international appeal
- Fill the endowed chair position to expand the graduate program

**C. Actions and Time Period (Fiscal Years)**

- Add international event and content @ Symposium FY 2013-2014
- Attend Asian Racing Conference to promote FY 2013-2014
- Develop online content/classes FY 2013-FY2016
- Measure Symposium progress and change accordingly FY2013-FY2014
- Maintain Executive in Residence FY2013-FY2017
- Endowed chair search/hire FY2015-2016

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Training to prepare distant learning courses
- Contact foreign stakeholders to track needs
- Consider faculty with foreign racing expertise (Endowed chair?)
- Partial salary line for endowed chair

**E. Objective metrics that will be used to track progress towards attaining goal**

- Measure total Symposium attendance and international attendance
- Number of Executives in Residence
- Number of exchange students
- Number of people signed up for distant learning courses
- Endowed chair hired

**Notes (if any)**

**Currently we do not have the staff to service graduate students in the manner in which the program was designed. We currently only accept 2 or three applicants per year due to the ability with current resources to provide the needed experience. We have declined qualified applicants in some years.**

**STRATEGIC GOAL SEVEN: Expand current human health research, collaboration, and teaching in the area of microbiology**

**A. Current situation and gap between current situation and desired situation**

Several active faculty projects currently focus on pathogenesis of bacterial and parasitic human disease and related research. This is an area of study attractive to current and future students, and current class offerings dovetail nicely with the program. However, these could be expanded. Currently studied pathogens represent areas of importance for government funding agencies but Industry collaboration in this area remains relatively low.

**B. Strategy/ies to achieve goal (list if more than one)**

- Increase course offerings in the area of human pathogens, medical microbiology, etc.
- Strategic faculty hires
- Increased collaboration with BIO5 and AHSC
- Increased collaboration with industry partners

**C. Actions and Time Period (Fiscal Years)**

- Hire additional research and teaching faculty FY2013-FY2015
- Expand course offerings FY2014-FY2016
- Increase funding and extension through collaboration FY2014-FY2021

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Increased faculty
- Updated and expanded facilities

**E. Objective metrics that will be used to track progress towards attaining goal**

- Grant funding
- Number of faculty doing research with a human disease focus
- Enrollment in relevant courses housed in the department

**Notes (if any)**

**STRATEGIC GOAL EIGHT: Revitalize virology program**

**A. Current situation and gap between current situation and desired situation**

Current department faculty members have some virology experience, but are not primarily focused on virology research at this time. Virology research at University of Arizona currently occurs in BIO5 and Plant Pathology but there is little to no outside funding for virology. Due to faculty retirement, human/animal Virology courses are not currently offered.

**B. Strategy/ies to achieve goal (list if more than one)**

- Increase virology faculty
- Offer previously existing and new virology course work
- Increase graduate student research in Microbiology area of the new School of Animal and Comparative Biomedical Sciences

**C. Actions and Time Period (Fiscal Years)**

- Strategic hire of faculty with existing research funding FY2013-FY2015
- Expansion of virology based course work available FY2014-FY2015
- Continue to seek additional funding and possible industry collaboration FY2014-FY2021
- Continued faculty expansion FY2014-FY2021

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Facilities update/expansion

**E. Objective metrics that will be used to track progress towards attaining goal**

- Enrollment in virology course work
- Graduate research in virology
- Research funding
- Research publications

**Notes (if any)**

## **STRATEGIC GOAL NINE: Increase undergraduate enrollment and program diversity**

### **A. Current situation and gap between current situation and desired situation**

Recent website redesign at the University (degree search), college and departmental levels provide increased exposure and information for incoming students. Added to our other recruitment activities, undergraduate enrollment has increased over the past several years in all three majors: Animal Science, Veterinary Science, and Microbiology. We have excellent undergraduate scholarship opportunities and funding for both animal science and veterinary science. Advising of these undergraduate has been a challenge due to limited financial resources, and the advisor to student ratios have been maximized. With the new school and focus on biomedical sciences, we anticipate and strive to double our undergraduate enrollment. To do this, we will need more resources to hire advisors as well as increase course offerings/capacity, as many of the courses offered currently are at maximum capacity.

### **B. Strategy/ies to achieve goal (list if more than one)**

- Increase faculty numbers through creation of a school and strategic hires
- Expand undergraduate scholarship opportunities
- Increase class offerings; whether it is by offering more or larger sections, or reorganizing some of these classes to be offered either partially or completely online
- Add additional major option focusing on basic lab animal care/management
- Reorganized and expand advising capacity
- Take advantage of the lower tuition at University of Arizona relative to the University of California to attract students through more recruitment efforts in California

### **C. Actions and Time Period (Fiscal Years)**

- Strategic faculty hires for additional research and teaching and advising FY2013-FY2017
- Introduction of additional majors or options FY2015-FY2019
- Addition of course offerings for undergraduate programs FY2013-FY2016
- Continue to seek increased and new funding sources to support current and future students FY2012-FY2021

### **D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Increased graduate student teaching opportunities provided by addition undergraduate course offerings
- Increased funding and new funding sources
- Expanded program offerings

### **E. Objective metrics that will be used to track progress towards attaining goal**

- Student enrollment and retention/graduation rates in relevant majors
- TA/RA funding
- Scholarship awards

**Notes (if any)**

**STRATEGIC GOAL TEN: Maintain and expand focus of core research, teaching, and extension programs in dairy, beef, and equine sciences**

**A. Current situation and gap between current situation and desired situation**

The facilities for beef feedlot research are outdated and need upgrades. There is no dairy research facility that allows for production level research – Plans are currently being developed for a facility that would work in conjunction with the completed ARC facility to meet this need. Experienced faculty, hired during the past two years, focus on both dairy and beef extension and will help these programs. Additionally, establishment of extension, teaching, and research programs in equine sciences focused on reproduction and nutrition have occurred. However, there is a lack of all livestock species on-site to provide for hands-on teaching experiences.

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop a plan for campus agriculture center that includes animal agriculture and increases teaching and extension capabilities through facility development and increased animal availability.
- Maintain and develop closer ties with animal agriculture throughout the state.
- Work with AMPHI High School Agriculture Program to develop hands-on experiences as well as mentoring between college and high school students.

**C. Actions and Time Period (Fiscal Years)**

- Develop a campus agriculture center master plan FY2012-FY2017
- Create and maintain strong relationships with dairy, beef, and equine industry partners FY2012-FY2021
- Execute campus agriculture center master plan FY2014-FY2021
- Fundraising for facility development FY2014-FY2021

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Administrative commitment to campus agriculture center master plan development and implementation
- Support from animal agriculture industries in the state to the plan
- Faculty leadership to follow through on the plan
- Commitment from campus agriculture center to the plan

**E. Objective metrics that will be used to track progress towards attaining goal**

- Development of master plan
- Facility development
- Animal numbers for teaching and extension programs
- Funds obtained to execute plan

**Notes (if any)**

**STRATEGIC GOAL ELEVEN: Direct teaching efforts to address lack of knowledge of production animal systems in a student population that comes from predominantly urban centers.**

**A. Current situation and gap between current situation and desired situation**

Students entering the animal science and veterinary science programs lack production animal agriculture experience because many come from urban areas. The lack of hands-on teaching opportunities resulting from inadequate animal numbers and facilities prevents students from acquiring the practical experiences needed to obtain a job in any production animal system. Furthermore, limited coursework on production animal systems is available due to faculty time limitations. Because of these deficiencies, a student-run club was formed, whose goal was to teach fundamentals of production agriculture from conception to the table. In theory, this was a good idea, but this club lacks the guidance of trained, experienced faculty, and students teaching students does not necessarily provide the right experiences. Our faculty wants to ensure that each and every student has a hands-on education in which not only are outcomes realized, but skill competencies as well.

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop animal sources and facilities to house agricultural animals that can be used to teach fundamental of production animal agriculture and encourage participation in clubs that provide opportunities for hands-on production training
- Develop courses that focus on production animal agriculture

**C. Actions and Time Period (Fiscal Years)**

- |   |               |
|---|---------------|
| • Hire faculty  | FY2014-FY2017 |
| • Develop production agriculture courses                                    | FY2014-FY2021 |
| • Create facilities to teach animal production                              | FY2014-FY2017 |
| • Develop animal sources  | FY2014-FY2017 |
| • Encourage membership in existing student let production agriculture clubs | FY2013-FY2021 |

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Animals
- Faculty
- Facilities

**E. Objective metrics that will be used to track progress towards attaining goal**

- Job placement in production animal agriculture
- Retention and graduation rates of students

**Notes (if any)**

There is currently no adequate system to maintain contact with previous graduates to track their development in the animal sciences/production field.

**STRATEGIC GOAL TWELVE: Reorganize Graduate Programs and Increase Graduate Student Base**

**A. Current situation and gap between current situation and desired situation**

Graduate student applications and enrollment have steadily declined in both Animal Science and Microbiology, mainly due to lack of support funds for these students. As ERE increases, the existing graduate student funds have not stretched to cover as many students. Increased recruitment efforts are needed with emphasis on quality being paramount. In addition, having enough graduate student funding and enrollment are critical to the undergraduate teaching mission. As undergraduate enrollment increases, there will be a need for more TAs in the classroom helping faculty with classes. The Education Task Force has recommended that there be one graduate program in Animal and Comparative Biomedical Sciences with options in Animal Science, Microbiology and Pathobiology. This organization is to ensure that minimum numbers of graduate students at the Master's and Doctoral levels are met to satisfy ABOR requirements.

**B. Strategy/ies to achieve goal (list if more than one)**

- Increased recruitment of quality graduate students
- Increased staff to focus on recruitment, retention, graduate tracking and advising
- Increase TA/RA funding
- Identify sources of new funds
- Include graduate student salaries when applying for grants

**C. Actions and Time Period (Fiscal Years)**

- |   |               |
|---|---------------|
| • Increased recruitment of graduate students                                  | FY2012-FY2021 |
| • Increase staff to handle student retention, graduate tracking, and advising | FY2012-FY2014 |
| • Redefine the graduate program   | FY2013-FY2014 |
| • Increase TA/RA funding  | FY2013-FY2015 |

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Commitment from department/school and college
- Faculty leadership
- Faculty willingness to advise graduate students

**E. Objective metrics that will be used to track progress towards attaining goal**

- Graduate Student numbers
- Retention rates
- Career placement
- TA/RA funding availability

**Notes (if any)**

**STRATEGIC GOAL THIRTEEN: Expand Extension Programs and Integrate Research to Meet Extension Needs**

**A. Current situation and gap between current situation and desired situation**

Extension programs are in a state of rebuilding after a period of little or no activity due to reduced availability of extension faculty. Currently the research and extension programs are not well integrated and there is need to improve the relationship between the college/school and the state animal agriculture industries. Animal science produces a quarterly newsletter that distributes to over 800 shareholders which may be one way to rebuild these relationships. The AzVDL also sends out updates to its 700 clients. The majority of large departmental research projects include extension components. While collaboration with agriculture extension facilities exists, it is limited. Industry collaboration is a missed opportunity that needs to be expanded tremendously, particularly in human, veterinary and food safety areas.

**B. Strategy/ies to achieve goal (list if more than one)**

- Develop strong dairy, beef, equine, veterinary and other appropriate extension programs
- Create a roadshow for extension/research programs – One current program is Cow College
- Increase faculty presence at industry functions
- Develop campus facilities to support on-campus extension activities
- Reactivate the “Ranch to Rail” and “Reservation to Rail” programs
- Increase collaboration with existing partners including CAS, Yuma cooperative extension facility and V bar V ranch
- Improve veterinary diagnostic and extension by creating remote interface facilities such as at V-V ranch
- Expand industry contacts
- Increase faculty/staff/student/administration involvement in the community

**C. Actions and Time Period (Fiscal Years)**

- Provide support for equine extension FY2012-FY2021
- Support new dairy, beef and veterinary extension program development FY2012-FY2015
- Increase industry involvement in department/school FY2012-FY2021
- Assess current extension programs and opportunities FY2013-FY2014
- Add additional extension programs, particularly in human health and food safety divisions FY2014-FY2018
- Increase industry involvement in department/school FY2012-FY2021

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Additional money/staffing for equine extension at the department and college level
- Support for new faculty in dairy/beef extension
- Facilities to foster development of extension programs on campus and at remote sites
- Faculty involvement in extension pursuits
- Facilities to foster collaborative extension efforts
- Increased staff/faculty funding for extension projects

**E. Objective metrics that will be used to track progress towards attaining goal**

- Number of extension programs
- Campus agricultural center visitor numbers
- Industry funding
- Extension publications
- Grant funding for extension programs
- Faculty % time devoted to service

**Notes (if any)**

**STRATEGIC GOAL FOURTEEN: Establish a School of Veterinary Medicine**

**A. Current situation and gap between current situation and desired situation**

ABOR has approved funding (\$3 million) to study the feasibility of opening such a school at the Tucson campus of the University of Arizona, and we are awaiting the approval from the Governor and State Legislature. Arizona does not currently have a veterinary school and the WICHE program pays \$1.4 million in support for students to attend out of state schools. Veterinarians are needed in Arizona, particularly in rural areas and for large animals. The current major in veterinary science provides many students qualified and competitive for veterinary medical college and would be the base from which to select for this professional program.

**B. Strategy/ies to achieve goal (list if more than one)**

- Use funding, if provided, to investigate the feasibility of such a school, including facilities, faculty, etc.

**C. Actions and Time Period (Fiscal Years)**

- Acquire funding for studies on feasibility of veterinary school FY2012-FY2013
- Assess requirements for new school and availability of resources FY2013-FY2014

**D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Initially, an assessment of feasibility, needs and available resources. Additional inputs may then be decided.

**E. Objective metrics that will be used to track progress towards attaining goal**

- Funding for initial studies.
- Approval for the establishment of a School of Veterinary Medicine.

**Notes (if any)**

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## **STRATEGIC GOAL FIFTEEN: Revise Undergraduate and Graduate Curriculum**

### **A. Current situation and gap between current situation and desired situation**

The undergraduate and graduate curriculum for all three majors is working well. However, there is a lack of stand-alone graduate level courses. Additionally, there are some areas of the undergraduate curriculum that has not been a focus due to loss of instructors. If the department is going to produce graduates with the knowledge and skills to be employable in the industry, course redesign is needed to make the majors more well-rounded.

### **B. Strategy/ies to achieve goal (list if more than one)**

- Review course content and focal areas
- Consider how best to include material that is missing from a well-rounded curriculum
- As a group, evaluate what is necessary versus luxury
- Consider current teaching assignments and how they may be maximized in the best possible way

### **C. Actions and Time Period (Fiscal Years)**

- Curricular review FY2013-2014
- Course modifications FY2013-2015
- If possible, faculty hires FY2014-2015

### **D. Inputs needed to achieve the goal (do not limit to financial inputs)**

- Curricular committee time to evaluate course material
- Course development
- Financial support to teach courses
- Availability of faculty to teach the necessary courses

### **E. Objective metrics that will be used to track progress towards attaining goal**

- Student enrollment
- Student retention
- Student graduation rates
- Student Credit Hours completed
- Career placement of graduates

**Notes (if any)**