College of Agriculture and Natural Resources

Mission

The mission of The College of Agriculture and Natural Resources at the University of Wyoming is to be the proactive leader in education and scholarship to cultivate healthy, sustainable systems for Wyoming’s agriculture, environment and natural resources, and rural communities. We serve people through the application of the land grant principles of learning, engagement, and discovery.

Vision

In 2020, the College of Agriculture and Natural Resources offers nationally recognized, top tier teaching, research, and extension programs in our fields of distinction. The teaching, research, and extension programs will be seamless in terms of access, appearance, and functionality. The college is recognized for having helped lead a campus-wide initiative on engagement with the Wyoming public and for providing unique opportunities for students to learn in practical ways.

Background

This academic plan responds to the UW College of Agriculture and Natural Resource issues identified in listening sessions for Academic Plan IV and the University of Wyoming Office of Academic Affairs document, Creation of the Future. It is linked to the University of Wyoming Academic Plan IV as well as the college’s Academic Plan III (http://www.uwyo.edu/uwag/academic-plans/uwag-academicplan-iii.pdf). Input was solicited from the public via listening sessions held around the state. Action items were identified also through discussions with the College of Agriculture’s Leadership team and faculty. Each department and program has developed its academic plan which can be found on the College of Agriculture and Natural Resource’s website.

Significant issues identified in public visioning sessions for the previous academic plan still resonate. They include the importance of (a) environment, and improved public understanding of agriculture, private and public land issues; (b) forage-based livestock systems, and healthy livestock and wildlife; (c) the family farm/ranch (youth development and young people in agriculture); (d) vibrant small communities, community leadership and information basis for decision-making; (e) profitability of agriculture and economic diversity including niches and value-added products; (f) agriculture, multiple use, and the endangered species act; (g) water quality and availability; (h) reclamation of disturbed lands and waters; and (i) involvement of local citizens and agriculture in community and state decision making processes.

Fundamental to the college and university in moving forward include focusing on (1) Students who are prepared to compete and succeed in a global economy and have a culture of lifelong learning and leadership; (2) Excellence in Academics which consists of providing sound fundamental and applied research as a foundation for our endeavors across the board in undergraduate education and extension/outreach; (3) Statewide engagement by identification of unbiased, producer-oriented research-based solutions,
enhancing our programs that reach out and engaging Wyoming’s people, and addressing significant issues facing the people of Wyoming in agriculture, renewable and natural resources, and rural communities; and (4) Provide for faculty success in all those endeavors.

The college has made significant progress from Academic Plan III found at http://www.uwyo.edu/uwag/academic-plans/uwag-academicplan-iii.pdf. Our Academic Plan III focused on areas of distinction, access, leadership, and resource allocation. Thirty of thirty-seven initiatives were completed. The 7 ongoing items largely reflect building issues that reappear in this plan.

Constituencies served and constituent needs addressed: This college’s stakeholders include agricultural and energy producers, state and federal agencies related to land management and environmental issues, wildlife interests and agencies, veterinarians and livestock producers, NGO federal and state land managers, rural communities and towns, small businesses, community colleges, students in our programs, and the scientific community at large.

- Degree programs offered in academic year 2012-13;
  - Agricultural Business (BS)
  - Agricultural Communications (BS)
  - Agricultural and Applied Economics (MS)
  - Agricultural Economics/Water Resources (MS)
  - Agroecology (BS)*
  - Agronomy (MS, PhD)
  - Animal and Veterinary Sciences (BS, MS, PhD)
  - Biomedical Sciences* (PhD)
  - Earth Systems Science** (BS)
  - Ecology* (PhD)
  - Entomology (MS, PhD)
  - Environment and Natural Resources** (BS, MS, PhD)
  - Family and Consumer Sciences (BS, MS)
  - Food Science and Human Nutrition (MS)
  - Hydrological Sciences * (PhD)
  - Microbiology (BS)
  - Molecular Biology (BS, MA, MS, PhD)
  - Molecular and Cellular Life Sciences* (PhD)
  - Neuroscience* (MS, PhD)
  - Organizational Leadership (BAS)
  - Rangeland Ecology and Watershed Management (BS, MS, PhD)
  - Soil Science (MS, PhD)
  - Water Resources (MS)

* Interdisciplinary
** Interdisciplinary, affiliated major
• Degrees granted in academic year 2012-13;
  o Certificate – 5
  o Bachelors – 179
  o Masters – 31
  o Doctorate – 17

• Faculty and staff numbers and deployment by department and discipline;

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- **Student majors, current academic year Fall 2013 End-of-Semester Unduplicated Headcounts:**
  - Agroecology – 43 (BS)
  - Agronomy – 19 (MS); 11 (PhD)
  - Agricultural Business – 111 (BS)
  - Agricultural & Applied Economics – 21 (MS)
  - Agricultural Communications – 27 (BS)
  - Agriculture Undeclared – 14 (option for deciding students)
  - Animal and Veterinary Sciences - 196 (BS); 19 (MS); 5 (PhD)
  - Biomedical Sciences* – 1 (MS); 3 (PhD)
  - Earth Systems Sciences* – 1 (BS)
  - Ecology* – 9 (PhD)
  - Entomology – 2 (MS); 5 (PhD)
  - Family and Consumer Sciences – 167 (BS); 3 (MS)
  - Food Science & Human Nutrition – 6 (MS)
  - Hydrologic Science* – 4 (PhD)
  - Microbiology – 84 (BS)
  - Molecular Biology – 57 (BS); 8 (MS); 15 (PhD)
  - Molecular & Cellular Life Sciences* – 28 (PhD)
  - Neuroscience* – 1 (MS); 1 (PhD)
  - Organizational Leadership – 68 (BAS)
  - Rangeland Ecology and Watershed Management 112 (BS); 27 (MS); 6 (PhD)
  - Soil Science 7 (MS); 2 (PhD)

  * Interdisciplinary

  - **Undergraduate Total Enrollment – 880**
  - **Graduate Student Total Enrollment – 203**
  - **TOTAL ENROLLMENT – 1083**
    (Fall 2013 End-of-Semester Unduplicated Headcounts)

**Significant Services to the State:**

Much of this information is available in the document produced by Anne Alexander on the UW outreach to the state. Highlights from the College of Agriculture and Natural Resources include:
- UW Extension addressed 269,677 contact requests from all counties in Wyoming alone in 2012. UW Extension has offices in all 23 counties and on the Wind River Indian Reservation.
- The Wyoming State Veterinary Laboratory handled 19,189 cases from all of Wyoming's counties in 2012.
- The Wyoming Agricultural Experiment station has facilities for applied research in 4 locations around Wyoming including Powell, Sheridan, Lingle, and Laramie. This service conducted over 100 producer – oriented research projects in 2011, 2012, and again in 2013.
- The College of Agriculture and Natural Resources attracted $12,483,450 in external awards in FY 12 and $13,786,500 in FY 13.

**Strengths, Weaknesses, Opportunities, and Challenges:**

Each department has conducted a SWOC, which underlies their individual plans. Significant issues facing the College of Agriculture and Natural Resources include:

- **Strengths:**
  - Our extension/engagement/outreach system and culture of service
  - Strong ethic of attracting outside funds to support research
  - Programs and focus areas that are relevant to the state and jobs
  - Hands-on opportunities for students
  - Hard working faculty and staff
  - Three of four R and E Centers recently rebuilt
  - Constituent relations are strong
  - Applied research programs responsive to producer needs

- **Weaknesses:**
  - Inability to save/move funds to meet needs in the field and laboratories
  - Lack of depth in key areas
  - Some majors/options are spread too thinly for available faculty depth
  - Lack of funding for applied research
  - Lack of funding for new Extension program efforts; i.e. After school STEM, community development.

- **Opportunities**
  - The Wyoming Reclamation and Restoration Center (both strengths and opportunities)
  - The Wyoming Wildlife Livestock Health Program (both strengths and opportunities)
  - Further develop hands on teaching programs for students
  - Expand funding to support constituent-oriented applied research
  - Ability to expand on engagement of our constituents

- **Challenges**
  - Low faculty salaries
  - Inadequate space for key research and teaching in Animal Science and Molecular Biology
Outdated/Inadequate facilities at the Laramie Research and Extension Center

A lack of appreciation across campus of agriculture and natural resources as a major part of the “S” in “STEM” and involved in all of STEM.

Excellence in Scholarship, Research, and Engagement

Wyoming Reclamation and Restoration Center (WRRC)

Wyoming’s culture, beauty, and economy largely depend on the health of our open lands as well as our people and rural communities. The Wyoming Reclamation and Restoration Center (WRRC) is one of the nation’s premier programs for land reclamation and ecosystem restoration based on sound ecological, agricultural, and economical practices. The goal of the WRRC is educating and engaging the next generation of scholars and practitioners, conducting research to solve problems and promote technological advances, providing outreach and extension to share knowledge through established education networks, and providing service to assist clientele seeking practical solutions for reclamation and restoration problems. Because Wyoming’s economy and lifestyle are so dependent on natural resource development and productive rangeland and mountain environments, successful management and where needed, restoration, of our forest and range lands is crucial to the quality of life.

The program is currently funded by annual support, grant and contract activity, and major gift commitments of $100,000 or more that are matched dollar for dollar with state matching funds. Research in the program continues to be driven, and is well funded by, our industry and agency partners. Our vision is for this program to become the largest and most respected program of its kind in the world. To do this, the program is set to expand to include nationally recognized research, teaching, and extension programming in the restoration of forest lands disturbed by wildfire. In addition, a recognizable interdisciplinary option for students in Reclamation and Restoration Ecology will be developed in addition to the current certification program and enrollment will be expanded substantially. Extension activities and workshops will be expanded to include recognized certification and continuing re-certification options (as part of our program in continuing education) in concert with our industry and agency partners and development of a nationally known Summer Reclamation Camp to attract majors.

Actions:

1. Raise funds to support the operations of the WRRC. The first task is to raise an additional $600,000 to release the remaining state match dollars. Identify new donors and/or work with the state to provide for more sustainable funding for the future. Current WRRC operations require funding of approximately
$300,000 per year; ongoing. Expansion of the program will require $500,000 per year ongoing.

2. Identify funds internally through allocation of existing faculty salary dollars and via private fundraising to hire at least two faculty members in wildfire and forest restoration to expand WRRC activities in that field, and one more to focus on remediation of disturbed soils (up to $400,000 per year, ongoing)

3. Provide the Center with a recognizable home, at some point perhaps in the refurbished National Guard Building next to the greenhouse on 30th street (Cost of renovation and availability of facility not determined).

Wyoming Wildlife-Livestock Health Center (WWLHC)

The Wyoming Wildlife-Livestock Health Center is focused on excellence in teaching, research, and extension about diseases that affect large, wild (deer, elk, wild sheep and goats, pronghorn, moose, and bison) and domestic (cattle, sheep, goats, horses) ungulates. The program is developing new understandings, including diagnostic and management/treatment strategies for disease such as brucellosis, chronic wasting disease, and pneumonia of sheep. In addition to scientists who are seeking solutions through improved modeling, testing, diagnosis, treatment, and vaccine development; the University of Wyoming WWLHC addresses the economics of disease.

Like the WRRC, this program is supported by a public-private partnership. The state’s funding for the university provides for salaries and a Wyoming Excellence Professor who studies the Ecology of Disease. In addition, the state has provided grant funding through the Wyoming Wildlife Livestock Disease Research Partnership. Recently the state supported the building of a $24.9 million addition to the veterinary science facility to support Biosafety Level 3 research activities. Collaborative partnerships with a top tier veterinary college such as UC Davis and/or Washington State University are now being built. Further, Wyoming has taken the lead in establishing CABS, the Consortium for the Advancement of Brucellosis Science. This is a multi-state and international effort to fund and research new strategies to detect and vaccinate-for brucellosis.

At present, private funding includes $1.2 million in endowments to support the Williams’ endowed chair and scholarships to support students at all levels. Additionally, the Riverbend Ranch Wildlife-Livestock Health endowment of $9.5 million will support to the Williams Chair, added a third chair to the program, and will support graduate students working in the field.

Actions:

4. Sell the Riverbend Ranch, which was donated to UW in 2011. Use the proceeds to develop an endowment to support the WWLHC. This is a ranch that is estimated to be worth approximately $9 million; thus generating approximately $300,000 per year. These funds will be used to hire a second excellence chair in research and teaching about the health of wildlife and livestock at the nexus between the two types of animals. Remaining funds
will be used to support graduate student and post-doctoral residents doing work in this area.

5. **Raise public and private funds to support research about development of improved vaccines and diagnostic tests for brucellosis.** The estimated cost of this development ranges upward from about $10 million.

6. **Add two additional faculty chairs fields related to animal health to support development of a recognized residency and post graduate program as well as to provide for in-depth research about diseases common to wildlife and livestock (ongoing cost $250,000) from private sources or state support.**

7. **Renovate the buildings acquired when the USDA left campus to house the WWLHC (funds included in Item 23, below).**

**Wyoming Agricultural Experiment Station (WAES)**

The WAES is working to facilitate grantmanship activities to help College of Agriculture and Natural Resources faculty in their quest for external funding. The faculty currently attract annual grant funding of approximately $13,000,000. The experiment station is focusing also on increasing the communication channels with all producers in order to help increase producer-driven research programming. The college received a $500,000 gift to support ranching related research in 2011. This was the initial gift for a college wide research program that supports Wyoming-needed research that we have named, “Wyoming is our Laboratory”.

The College of Agriculture and Natural Resources is committed to prioritizing the accomplishment of applied research needs of our stakeholders. This will require better ways to identify those key issues facing our producers and other stakeholders. Further, it will require funding for facilities, operations, and research costs.

**Actions:**

*Note: Action Item # 23 outlines a critical facility proposal to upgrade operations at the Laramie Research and Extension Center.*

8. **Raise additional private funds to support “Wyoming is our Laboratory” to augment the $500,000 gift to support producer-driven research.** The initial goal is to raise funds to provide at least $100,000 in endowed funds for each of the 4 research stations.

9. **Hire a grant writer to support enhanced grant funding for faculty.** This is currently underway via reallocation of a position within the college.

10. **Hire one staff member for the Sheridan Research and Extension Center to manage the greenhouse; and Academic Professionals to direct the Sheridan Research and Extension Center and the Powell Research and Extension Center.** The staff salary is estimated to be $50,000 and the Academic Professionals have salaries estimated to be $65,000 each. These funds will be allocated through college budgeting should that budgeting process be turned over to the colleges.
11. The Wyoming Agricultural Experiment Station and University of Wyoming Extension will develop seamless interactions in serving the public through applied research. This collaboration will include enhanced communications between constituents and both UW institutions. Stakeholder needs will be identified and research-based responses will be co-generated and communicated through a variety of channels to meet the expectations of agricultural producers and other constituents.

Access and Persistence to Graduation

Academic and Student Programs

“Students, the Reason We are Here!” is our motto. Many opportunities exist for students and faculty to learn and do research beyond classical classroom and laboratory work. These activities have received renewed attention and funding. Scholarship endowments are growing. Programs intend to attract increasing support for internships, externships, and expanded opportunities to do hands-on, applied learning in the laboratory through undergraduate research projects and incorporating practical and service-learning engagement opportunities for students in all of our curricula. Programs also provide support for students and student activities related to excellence in areas such as rodeo, livestock judging, and other extracurricular areas related to agriculture and natural resources.

Partnerships are already developing to enhance student development of practical skills. For example, the Margaret and Don Boyd excellence fund supported hiring a professional who will work with our upper level students in dietetics to provide diet advice and services to the UW athletic department. This fund provides $500,000 for 5 years of service.

The student ACRES farm is set up to provide student volunteers and classes from all over campus with experience in farming, organic methods, and community service. This farm also provides the community with local produce, horticulture know-how, and demonstrations of all types. The farm also provides an outlet for campus food and catering establishments for compostable food residues. A current endowment of $100,000 supports the program in part, along with departmental and college support. The program also receives support from various horticulture research grants

The college also is working to develop a new, intensive, hands-on, comprehensive farm and ranch management experience for interested students and new producers. This program will enhance the paid internships that were offered in 2013 on approximately 15 cooperating ranches in Wyoming. This program is intended initially to be launched at the college’s Y-Cross ranch facility and will be continued either there or if it is sold, in cooperation with ranchers and on UW ranch properties. If the sale of the ranch is realized, the endowment income from that property will support student scholarships, internships, and graduate fellowships in support of Wyoming Agriculture. In addition, a portion of the funds would support and enhance the farm and ranch management
intensive program that is now intended to start on the Y-Cross. Another portion of the endowment income will be used to support applied research needed by producers in ranching.

Learning off-campus is critical to any agriculturalist and anyone working in rural community development. Currently this college has three programs to help support travel and other activities related to learning off campus. “Beyond the Classroom” supports international travel for students. It is supported by income from two endowments and annual giving. “SEND” is a program that supports primarily domestic travel by undergraduate students to attend conferences, meetings, and internships held in the US. It is supported by annual giving. “Global Perspectives” is an endowed program that supports international travel for research, teaching, and extension/outreach by faculty members. This unique endowment also supports bringing international scholars to the UW campus.

Actions:

12. Identify additional funding for hands-on learning opportunities such as, but not exclusively: Beyond the Classroom, SEND, ACRES student farm, the Early Care and Education Center, and others. A goal would be to add approximately $200,000 in endowed funds for the two off campus programs, $200,000 for the ACRES student farm, and another $200,000 to support other hands-on learning programs. It would be anticipated that these endowments would come from private sources. Solidify the growth of the Didactic Program in Nutrition and Dietetics by finding permanent funding for the currently donor-funded director ($60,000/year salary) through private fundraising and/or reallocation of funds within the college should that be allowed.

13. Develop an integrated, practical, capstone program for ranch management that would involve the use of the Y-Cross, other UW properties, or private collaborators. This would be funded through sale of the Y-Cross, should that come about, or private fundraising. It is estimated that this project may consume up to $100,000/year.

14. Expand paid internship opportunities in collaboration with private ranchers in Wyoming and/or the region. Currently all students who seek an internship with a private firm have been placed. However, expanding the list of consistent, meaningful, paid internships by 2 to 5 would benefit students.

Leadership

Developing leadership skills for students and faculty is critical to the sustainability of Agriculture and Natural Resource Programming. As Jack Welch (former CEO for GE) said in so many ways, he could not promote employees unless they had mentored others for their area. Development of our up and coming faculty members for the next steps is critical to our success. Currently, two faculty members per year are supported to attend the national USDA leadership development program. Additionally, one member per year is supported for outside leadership development programs, including
one faculty member who will attend the national Food Systems Leadership Institute. These programs will continue to be supported through the college office. Student leadership programs are growing on this campus. We will work with others on campus to seek a more cohesive track for leadership development as their careers at UW develop. The College of Agriculture and Natural Resources now offers a 1 credit, “Elements of Leadership” course with a practical learning project as part of the curriculum. This course will have been integrated with other offerings on campus. The undergraduate curriculum in general will look to incorporate leadership principles in multiple classes along with the idea of fostering lifelong learning. This effort, now partially supported by annual giving, will need more resources in the next 6 years as it grows campus-wide.

PhD production is a big part of a research-intensive university’s faculty responsibility. This college will need to continue to work to identify opportunities for faculty members who do not currently have direct access to a PhD program to remedy this situation.

**Actions:**

15. **Inventory opportunities for leadership development among students, faculty, and external stakeholders via UW programs.** Work with all stakeholders to make these programs more cohesive and determine whether a certificate or other program may make sense for students.

16. **Raise funds to support the development of expanded, more cohesive leadership opportunities on campus.** Specifically for this college, expand the funding for “Elements of Leadership” to offer more sections and/or content. This would require $45,000/year, ongoing.

17. **Raise an additional $250,000 to support “Global Perspectives” for faculty.**

18. **Continue to support at least 2 faculty development programs per year through the college.** Encourage departments to contribute to faculty leadership development through on-campus and off campus offerings. Support the development of a leadership program for faculty on campus with Business and Arts and Sciences colleges.

**Service and Engagement to Stakeholders in Wyoming and Beyond**

**University of Wyoming Extension and other Services to the State of Wyoming**

We will work to help the University of Wyoming Extension’s standard practice of engaging Wyoming’s citizens to become a common culture across campus. This extension engagement needs to become even more of a two way communication where faculty from all areas are engaged in listening to constituents, and finding ways to answer academic and applied research questions posed by our stakeholders. Programs offered through this college are responsive to constituent needs, and will be seamlessly offered via the extension and experiment station arms of the college. Client input are now received and prioritized by local advisory boards made up of members of the public and elected officials. Areas of continued service, extension, and applied
research activity in the state include sustainable agricultural systems, range and reclamation resource management, community and leadership development, nutrition education, and youth development (4H). The Wyoming State Veterinary Laboratory will work to retain its accredited standing as one of the leading small, full service, veterinary diagnostic services in the nation. That service is well underpinned by the internationally recognized research from the WWLHC. These programs will continue to be funded through a mix of federal, state, and local support.

**Actions:**

*Note: See Action Item #11; which pertains directly to UW Extension as well.*

19. Attract private support ($500,000 to $1,000,000) to endow a program to support development of unique initiatives to serve Wyoming through UW Extension.

20. Support the expansion of extension/engagement as a culture throughout campus. This would necessarily involve collaboration with other colleges and the faculty. Work with the faculty senate to better recognize the scholarship of extension campus-wide.

21. Continue to modernize the service to the state from the Wyoming State Veterinary Laboratory. This will include replacement of equipment and prioritization of filling vacated positions in faculty and staff. Work with the WSVL to further define its scholarship related to the “One Health” initiative. Identify and engage key collaborators in making that happen through the WWLHC mentioned above.

22. Bring more focus and clarity to the leadership of the Wyoming 4H program in UW Extension to help lead this key youth development program across the state.

**Attracting Resources to Accomplish our Mission**

**Facilities**

Applied research in response to local and state needs is a centerpiece of this college’s mission to serve our producers and rural communities. Just before the turn of the century, the University of Wyoming embarked on a program of rebuilding and restructuring our four Research and Extension Centers. The first center that was modernized was the Powell Research and Extension Center. This effort was two phased and involved rebuilding the center facility and later adding the state seed laboratory to our operation. Next, centers in Afton, Cheyenne, and Torrington were closed, sold, and the proceeds used to set up the James C. Hageman Sustainable Agriculture Research and Extension Center in Lingle, Wyoming. That program was also supported by additional state and federal grant support. Recently, the Sheridan Research and Extension Center was moved to a new ranch near Sheridan College thanks to a generous gift of ranch property (via long term lease) by Whitney Benefits. That foundation also funded a faculty position to be housed at the center. In 2012 the
State of Wyoming provided an additional $5,300,000 to purchase, and build, facilities. This center rebuild is now largely complete. The final center comprises the facilities on the UW main campus in Laramie. The facilities at the Laramie Research and Extension Center are in disrepair and/or obsolete. State dollars will be needed to rebuild this center, including modernizing the aging greenhouse, repairing or replacing the “round-building” animal facilities, taking care of deferred maintenance issues on the livestock center, and developing the McGuire Ranch into a one-of-a-kind high altitude forage-livestock research and education center. The estimated $7,000,000 in repair and rebuilding funds will be sought as a UW priority for one-time state funding and repairs as soon as possible.

The Animal Science/Molecular Biology building was built in the early 1980's. Unfortunately, due to falling state revenues at that time, the building was never completed. Despite that, the administrative decision was made to move both programs into what were already very cramped quarters. Given the level of extramural research funding received by researchers in the Departments of Animal Science and Molecular Biology, that building must be expanded to house the faculty of those departments as intended originally.

Actions:

23. The research and extension centers in Powell, Lingle, and Sheridan have been rebuilt via combinations of private and public funding. The Laramie Research and Extension Center is now in disrepair and requires rebuilding. The estimated cost of this effort is $7 million. This project will be submitted to the Vice Presidents for Academic Affairs and Administration and Finance for prioritization on the facilities priority list.

24. The Animal Science/Molecular Biology building addition/completion is estimated to cost approximately $23 million. With renovation of the meats laboratory it would cost approximately $25 million in total (an additional $2 million). This project will also be submitted to the Vice Presidents for Academic Affairs and Administration and Finance for prioritization on the facilities priority list. This project will also be submitted as part of the UW-wide Science/STEM initiative.

25. Repair, complete, and make operational, the BSL 3 Laboratory at the Wyoming State Veterinary Laboratory. This project is currently being considered by the state and is key to the ability to do diagnostics and research about many diseases of animals and humans such as brucellosis, plague, and tularemia, all of which occur naturally in Wyoming.

26. Work with the Vice Presidents of Academic Affairs and Administration and Finance to develop a plan and cost estimate for renovation of all of the main, Ag C building.

Succession Planning:
1. Dean and Associate Deans: Training and development opportunities have been made to the Associate Deans in a variety of ways, including Leadership Wyoming, USDA Food Systems Leadership Institute, and USDA Lead 21 programs. Associate Deans are asked to stand in for the dean at various times during his absence. Each associate has been evaluated for their progress along this line in terms of succeeding the Dean.

2. Department Heads: Promising faculty leaders have been selected for leadership development via the internal UW Leadership development program and the national, USDA Lead 21 program. This is a year-long program designed to prepare faculty for the next step into leadership at the Departmental and Associate Dean levels. Further, the department heads are also provided with opportunities to train and assist at the Associate Dean level. Faculty members in each department have been evaluated for potential for future leadership. In addition, promising Department Heads can be identified for the next level at the Associate Dean positions.