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#### Dear MSU College of Agriculture and Montana Agricultural Experiment Station Community,

It is our pleasure to introduce the 2020-2025 COA/MAES Strategic Plan. The plan is the result of nearly oneyear of efforts by the many individuals who lead and support the many COA/MAES research and development, transformational teaching, and outreach and engagement activities that affect and benefit every Montanan. We are proud that this strategic plan was developed through an inclusive process and represents a collective outlook for making COA/MAES a more effective contributor to the success of all Montana communities.

The development of the COA/MAES strategic plan began in March 2019 as an effort to align the COA/MAES efforts with the <u>University's strategic plan</u> and to help provide broad guidance for the COA/MAES over the next five years. As a part of this effort, COA/MAES hired a consulting firm, Sagency, to facilitate the strategic planning process by objectively collecting and evaluating the strengths and opportunities of COA/MAES as a fundamental part of our land-grant university. Sagency's proven record in leading these types of impartial, grassroots-driven efforts at other organizations—including colleges at land-grant universities—made this choice the most efficient and effective way to reach that goal.

The strategic planning process involved several phases. The first and most critical was gathering information across the many individuals and groups that impact and are impacted by COA/MAES. These groups included the faculty, professionals and staff, current undergraduate and graduate students, alumni, and members of the many Montana communities who look to COA/MAES to provide impactful research and education. Information was collected through survey responses and one-on one interviews and the responses were open, thoughtful, and highly constructive. These reflections and comments served as the foundation for developing the strategic plan.

The second phase of the strategic planning process was for a smaller group of individuals from the COA/MAES Dean's office, department heads, and faculty senators from each department to work with Sagency to compile and synthesize the gathered information and identify common themes and opportunities that can be used to form the beginnings of a strategic plan. The group identified seven focus areas that serve as the foundations of the COA/MAES strategic plan:

- Building a people-driven culture
- Being a leader in innovative and impactful research and development
- Inspiring transformational learning
- Engaging in impactful outreach across Montana's diverse communities
- Developing and strengthening partnerships
- Strategically administrating human, fiscal, and infrastructure resources
- Effectively communicating with internal and external audiences

Each of the seven areas had a small group of faculty, staff, and undergraduate and graduate students who worked toward formalizing the goals in each area and drafting action plans for achieving those goals over the next five years. Their collaborative work was a concerted, efficient, and representative effort to develop a cohesive strategic plan draft that reflected the collective, grassroots feedback provided by COA/MAES faculty, professionals, staff, students, alumni, and community members.

During the third phase, the entire COA/MAES faculty, professional, and staff community was invited to gather on the MSU–Bozeman campus to provide their feedback about the initial strategic plan draft. Through multiple group-based discussions and follow-up electronic survey, the additional feedback was incorporated into the strategic plan.

As a result of these efforts, 41 priorities within the seven focus areas were identified. To ensure that the COA/MAES faculty and staff can succeed in achieving the proposed goals, the group of Dean's office leaders, department heads, and faculty senators from each department was asked to narrow down the priorities within the seven focus areas. The priorities that did not make it into the pared down list were recorded and will remain as efforts that need to be regularly revisited and eventually completed. There was significant effort into developing all of the priorities, and a long-term goal is to make large strides toward meeting all of the priorities, students, and alumni have identified.

The plan was finalized and began to guide the COA/MAES mission in February 2020. We would like to thank everyone who contributed to the plan's development and are humbled by seeing so many individuals within and outside of COA/MAES provide time and effort to ensure that this process was a success. We are excited to see the fruits of this labor over the next five years and beyond.

Sincerely,

#### Sreekala Bajwa

Vice President of Agriculture, Dean of the College of Agriculture, and Director of the Montana Agriculture Experiment Station

#### Anton Bekkerman

Associate Director of the Montana Agricultural Experiment Station



College of AGRICULTURE & MONTANA AGRICULTURAL EXPERIMENT STATION



We transform lives for the benefit of Agriculture and Society.

# Mission

#### What we do and for whom

We provide transformative education, translational research, and engaging outreach programs to make significant contributions to the agricultural ecosystem and societal well-being in Montana and beyond.

# **5-Year Vision**

#### Where we are going and whom we are becoming

The MSU College of Agriculture and the Montana Agricultural Experiment Station will be a global leader in the areas of agricultural, food, natural resource, environmental, and life sciences, known for integrating discovery-based learning, innovative research, community engagement, and outreach to benefit society.



# + Excellence

#### We pursue exceptional outcomes through:

Scientifically sound research; leadership development; goal- and outcome-oriented professionalism; continuous improvement; development of new technologies; development of relevant, high-quality courses; recruitment and effective on-boarding and mentoring of faculty at the top of their fields; exceptional guidance to students; personal responsibility for our development; and communication of knowledge and innovation to stakeholders.

# + Integrity

#### We commit to honesty, ethical behavior, and accountability through:

Unbiased responsible research; fair application of policies and procedures; respect and civility to all; earning the trust of others through consistency of actions with stated values and commitments; striving to do what is right; transparent communication; and objective and responsible pedagogical approaches.

# + Diversity and Inclusion

# We create a civil, supportive, and respectful environment where differences and diversity are sources of strength through:

Strategically and actively recruiting diverse faculty, staff, and students; incorporating focused activities in our workplace, classrooms, and labs; confronting disrespectful or prejudiced behavior; incorporating civility and diversity into mentoring activities and engagement; treating all people with dignity and respect; actively eliciting diverse perspectives, ideas, and backgrounds to challenge the status quo; fostering respect and appreciation for each person whatever that person's background, race, age, gender, disability, values, sexual orientation, perspectives, or interests; seeking out differing perspectives, ideas, and approaches; recognizing differences in people as opportunities for learning about and approaching things differently; consistently evaluating our initiatives in this area; and making decisions after thoughtful review of input from multiple perspectives.



# + Collaboration

#### We believe that working together produces better outcomes through:

Creating partnerships; applying interdisciplinary approaches to teaching, outreach, and research; building and nourishing networks; creating and offering unique opportunities; integrating teaching, research, and outreach; working to remove barriers to collaboration across the organization and reducing distances.

# + Curiosity

#### We expect inquiry, exploration, creativity, and innovation through:

Securing external grant funding; conducting high-level research; working across disciplines; stimulating student research, teaching, and service opportunities; actively listening; asking questions-challenging the status quo and never stopping to learn; thinking critically and recognizing that failure is natural and important to eventual success.

# + Stewardship

# We care for and conserve the human, economic, physical, and environmental resources entrusted to us by:

Ensuring that resources are effectively and efficiently used in support of the MSU mission; rewarding achievement; being thoughtful and effective in evaluation; communicating return on our investments; attracting and effectively using resources with transparency and accountability to advance our mission; maintaining sustainable management of resources; and maximizing the value of our human, financial, and physical resources in ways consistent with our purpose, mission, and values.



W ith a clear sense of why we exist (our purpose), what we do (our mission), future aspirations (our vision), and how we behave (our core values) as the foundation, we will work in a coordinated way to meet these future challenges that will come our way. Our strategic plan will be a roadmap to impact the health of our environment, food, economy, and people of Montana, our region, and the world.

# FOCUS AREA 1: PEOPLE-DRIVEN ENVIRONMENT

**GOAL:** *EMPOWERING PEOPLE AND PROVIDING AN ENVIRONMENT FOR INDIVIDUAL AND* ORGANIZATIONAL EXCELLENCE.

1. Build a culture of recognition (financial and professional) and appreciation that confirms the importance of faculty and staff to the success of the college, values and encourages effective communication, values and encourages partnerships, and empowers faculty to conduct excellent research especially with a focus on the *Grand Challenges*.

(Alignment with MSU Choosing Promise goals 2.1, 2.3, 2.4, 3.3)

<u>Participants</u>: Department heads and nomination committees, Dean's office, Dean's Office Administrative Staff

<u>Metrics</u>: Number of nominations and awards given, celebrations held, number of recognition notices sent. Particular focus on awards for early-career successes and recognition of long-tenured faculty and retirees.

#### 2. Improve organization, inclusivity and team-building efforts.

(Alignment with MSU Choosing Promise goals 3.3)

Participants: All COA/MAES faculty, staff, students, and stakeholders.

<u>Metrics:</u> Qualitative surveys of progress, calls to action and efforts undertaken, growth in the diversity of COA/MAES faculty and staff, increased professional development opportunities and resources to increase leadership for collaborative activities; develop a quantifiable diversity plan within each department.

# FOCUS AREA 1: PEOPLE-DRIVEN ENVIRONMENT

**GOAL:** *EMPOWERING PEOPLE AND PROVIDING AN ENVIRONMENT FOR INDIVIDUAL AND* ORGANIZATIONAL EXCELLENCE.

# 3. Create a larger network and opportunities across COA/MAES to participate in teaching, research, and service.

<u>Participants</u>: Dean's office team, COA/MAES communication director, department heads, departmental undergraduate and graduate coordinators, departmental communication personnel, faculty, and staff.

<u>Metrics:</u> Annual occurrence of an excellence in research and teaching celebration, number of travel award applications submitted and awarded, increase in the number of internships supported at Research Centers and local industry partners, number of social media contacts and quantitative evidence of engagement, developing the "I am Ag" campaign.



1. Facilitate and encourage interdepartmental and interdisciplinary collaborations through (a) fostering interdisciplinary research to address *Grand Challenges*; (b) prioritizing shared labs and facilities; (c) developing department and college-level strategies for valuing, incentivizing, and highlighting/recognizing interdisciplinary research; and (d) developing research that is relevant to Montanans but scalable nationally to increase broader recognition of COA/MAES as a leader in agricultural, food, natural, environmental, and life sciences.

(Alignment with MSU Choosing Promise goals 2.2, 3.3)

Participants: Dean's office team and department heads, faculty, staff, students

<u>Metrics:</u> Assess current cross-departmental, team building activities, grant applications, and publications lists; identify who has been most successful in these types of collaborations and elicit feedback about best practices; develop departmental, center, and institute strategies for increasing collaborative research, promote and support Agrelated cross-disciplinary seminar series (e.g., IOE, Bair Ranch, IRAEA seminars) that bring national leaders to campus; develop COA/MAES-wide strategies for increase collaborative research; monitor progress of collaborative projects via grant proposals, funded projects, published papers, etc.

# **FOCUS AREA 2: IMPACTFUL RESEARCH AND DEVELOPMENT GOAL:** TO ADVANCE INNOVATIVE RESEARCH TO ENHANCE LOCAL AND GLOBAL IMPACT.

2. Build on current research strengths by: (a) enhancing regional and national reputation of current strengths; (b) leveraging historical strengths and unique areas of research to increase external funds, new partnerships, and recruitment of faculty, staff, and students; (c) assess ability to encourage disciplinary leaders outside of MSU to visit COA/MAES to increase awareness of MSU researchers and create new collaborations; and (d) develop strategies for creating a culture of recognizing and incentivizing high-impact R&D within and across units, especially research that focuses on addressing *Grand Challenges*.

(Alignment with MSU Choosing Promise goals 2.3)

Participants: Faculty, staff, students, Dean's office team, department heads

<u>Metrics</u>: Increased participation in multi-state Hatch projects, develop new western region focused multi-state projects, re-design COA/MAES website to better communicate existing research strengths and distinctions, develop research-specific awards that not only recognize high-impact research but provide additional incentives to build on these strengths, assess availability and current distribution of resources and develop strategies to effectively leverage these resources to increase high-impact R&D.

# **FOCUS AREA 2: IMPACTFUL RESEARCH AND DEVELOPMENT GOAL:** TO ADVANCE INNOVATIVE RESEARCH TO ENHANCE LOCAL AND GLOBAL IMPACT.

3. Increase graduate student numbers, with a particular focus on Ph.D., through: (a) developing more transparency of current GRA/GTA distribution and strategic assessment of future distributions; (b) increased monitoring of graduation rates and job placements, and (c) assessing strategies for recruiting new students, both on the main campus and at the seven Research Centers.

(Alignment with MSU Choosing Promise goals 1.2, 2.1)

<u>Participants</u>: Dean's office team, departmental graduate coordinators, department heads, faculty, staff, and students.

<u>Metrics</u>: Collect and assess data about historical and current GRA/GTA distributions within COA/MAES and make these data more transparent; assess opportunities to more strategically allocate GRA/GTA funds to increase recruitment, retention, and impact of graduate students; assess standardized ways to more effectively monitor graduation rates and job placements and determine how to effectively implement these across programs; develop steering committee for assessing and recommending changes to recruitment of students, both on the main campus and at the Research Centers.



# FOCUS AREA 3: TRANSFORMATIONAL TEACHING AND LEARNING

**GOAL:** DEVELOP COMPETENT LIFE-LONG LEARNERS AND LEADERS WHO EXCEL IN THEIR CHOSEN CAREER AND LIFE EXPERIENCES

> 1. Explore opportunities for incorporating local research in labs and classrooms, and bring MAES and Research Centers into the classroom through highlighting their missions, current research projects, and through guest lecturers in appropriate classes.

(Alignment with MSU Choosing Promise goals 2.1.3)

<u>Participants</u>: Faculty and instructors, departmental curriculum committees, COA curriculum committee, COA Associate Dean for Academic Programs, MAES Associate Director.

<u>Metrics</u>: Develop a theme around a large issue for freshman classes that all aspects of introductory COA classes could work toward. Provide evidence of exploration, demonstrable action resulting from exploration, and incorporation of MAES and Research Centers into curricula.

2. Explore certificates, stackable credentials, accelerated program opportunities, and opportunities for increasing online classes for graduate students, with a particular focus on more effectively engaging employers to understand industry needs for student training.

(Alignment with MSU Choosing Promise goals 1.1.3, 1.2, 2.2.4, 3.2.4)

<u>Participants:</u> departmental curriculum committees, COA curriculum committee, COA Associate Dean for Academic Programs, Ag Student Council, Ag Ambassadors, department heads, leveraging existing events (e.g., John Deere Ag Expo, MSU career fair.)

<u>Metrics</u>: Formal assessments of needs and resources for additional and online program opportunities, development of new programs, enrollment, new program success, and feedback from instructors and students, employer and industry engagement in the classroom and career fairs, questionnaire responses from employers about industry needs.

# FOCUS AREA 3: TRANSFORMATIONAL TEACHING AND LEARNING

**GOAL:** DEVELOP COMPETENT LIFE-LONG LEARNERS AND LEADERS WHO EXCEL IN THEIR CHOSEN CAREER AND LIFE EXPERIENCES

3. Increase access to COA undergraduate programs through developing a College-wide recruitment plan that includes focused recruiting in Montana, and with a specific effort on identifying opportunities to increase tribal K-12 relationships and tribal student enrollment.

(Alignment with MSU Choosing Promise goals 1.1, 3.2)

<u>Participants:</u> Dean, department heads, COA curriculum committees, COA Ambassadors, Faculty, COA alumni.

<u>Metrics</u>: A plan that encompasses opportunities across departments within COA, with a specific focus on underrepresented populations and emphasis on working with COA alumni to identify prospective student communities and opportunities for successful careers.

# FOCUS AREA 4: EFFECTIVE AND INCLUSIVE ENGAGEMENT AND OUTREACH

**GOAL:** TO PROMOTE COMMUNITY-BASED PARTNERSHIPS AND SHARE KNOWLEDGE TO IMPROVE LIFE AND SOCIETY

1. Identify a common definition of outreach and engagement and metrics to measure efficacy and impact; create a common category for reporting in Activity Insight across all units.

<u>Participants:</u> Dean's office team, COA/MAES/MSUE faculty, and staff joint steering committee, MSU Office of Planning and Analysis (Activity Insight) faculty and staff.

<u>Metrics</u>: Assessment and development of a common definition and efficacy metrics; implementation of COA/MAES-specific category in Activity Insight to report activities; increased transparency and recognition within and outside of COA/MAES of the outreach and engagement by COA/MAES faculty and staff; tracking of new engagement projects, relationships generated, outreach gaps filled, community perceptions, etc. as reported by faculty and staff.

2. Build an inventory of our current collaborations and work with MSU Extension and stakeholders to identify gaps in outreach and engagement.

(Alignment with MSU Choosing Promise goals 3.2)

<u>Participants</u>: Dean's office team, department heads, MSU Extension, COA/MAES/MSUE joint steering committee, faculty, and staff.

<u>Metrics</u>: Survey of current and potential collaborations; developing a database of collaborations based on responses; identifying and communicating gaps and opportunities to fill those gaps.



# FOCUS AREA 5: STRENGTHENING AND GROWING PARTNERSHIPS

**GOAL:** BUILD AND MAINTAIN ENDURING PARTNERSHIPS TO ADVANCE THE LAND GRANT MISSION

> 1. Increase communication and interaction with commodity and allied organizations by engaging with these organizations at their annual conventions and by assessing opportunities to engage with the Montana Ag Coalition and natural resource agencies/ entities.

(Alignment with MSU Choosing Promise goals 3.2)

<u>Participants:</u> Dean's office team, related/interested faculty and staff, and external stakeholders.

<u>Metrics</u>: Assessment of existing and potential opportunities through faculty and staff survey; development of strategies for increasing COA/MAES attendance, representation, and interaction with external organizations; identification of conventions and other events around the state and region where interactions between COA/MAES representatives and external partners may occur.

2. Develop a framework for educating, training, and mentoring COA/MAES faculty about the available resources for (a) efficient and effective communication, (b) building partnerships, (c) developing effective outreach/engagement programs, (d) leading effective advisory committees, (e) using the technology transfer office, and (f) assessing current needs of employers.

(Alignment with MSU Choosing Promise goals 3.3)

<u>Participants</u>: Faculty and staff, department heads, COA Dean's office team, MSU Office of Diversity and Inclusion, MSU Extension.

<u>Metrics</u>: Assess needs and opportunities for training faculty and staff to interact with existing and potential stakeholders of research and education; develop understanding of how to work with diverse partners, including tribal colleges and other underrepresented groups; assess and disseminate of knowledge about current and future needs of employers of COA graduates; assess opportunities and develop training for effective communication across a diverse set of audiences; increase in the number of gifts (monetary and in-kind) from COA/MAES stakeholders and partners.

### **FOCUS AREA 6: STRATEGIC STEWARDSHIP OF RESOURCES GOAL:** DEVELOP AND IMPROVE EFFICIENT AND TRANSPARENT BUSINESS PRACTICES

1. Develop a biennium legislative funding plan that will: (a) build on proposed and funded initiatives from the previous plan and (b) develop, justify, and prioritize strategic funding initiatives for upcoming sessions.

Participants: Dean's office team, department heads, faculty, and staff.

<u>Metrics</u>: Collect and assess historical initiatives proposed to the Montana legislature; assess successes and failures; develop formal process to developing future plans.

2. Develop a process for (a) assessing inventory of college-level resources, (b) identifying opportunities for sharing of facilities and other resources, and (c) establishing a process for managing and maximizing the cost-effectiveness of shared resources.

(Alignment with MSU Choosing Promise goals 2.1, 2.2)

<u>Participants</u>: Dean's office team, department heads, faculty and staff in existing shared spaces, faculty and staff steering committee.

<u>Metrics:</u> Survey faculty on research infrastructure and other college-level resource uses, needs, and wants; developing a database of existing and potential shared resource opportunities; developing a strategic and formal process for managing college-level resources; identifying opportunities and goals for investment and capacity building in the short, medium-, and long-, runs.

### **FOCUS AREA 6: STRATEGIC STEWARDSHIP OF RESOURCES GOAL:** DEVELOP AND IMPROVE EFFICIENT AND TRANSPARENT BUSINESS PRACTICES

3. Assess (a) current staffing requirements for the college, (b) ability to incentivize outreach/engagement activities, (c) ability to incentivize and support faculty so they can be more responsive to national and regional calls for grant opportunities especially those that associate with *Grand Challenges*, and (d) strategic investment in research support personnel. Then, develop a strategic investment prioritization and proposal process to address needs over short, medium-, and long-run horizons. (Alignment with MSU Choosing Promise goals 2.1, 2.2)

Participants: Dean's office team, department heads, faculty and staff steering committee.

<u>Metrics</u>: Assess staffing needs across COA/MAES; develop formal strategic prioritization procedure; develop strategic investment prioritization plan opportunities for fulfilling the plan.

### **FOCUS AREA 7: TRANSPARENT AND EFFECTIVE COMMUNICATION GOAL:** ENHANCE THE OUALITY OF OUR COMMUNICATION INTERNALLY AND EXTERNALLY

1. Assess (a) the type, content, and frequency of internal communication that faculty and staff would like to receive, (b) communication effectiveness with existing partnerships and opportunities for future partnerships, and (c) existing engagement and outreach strengths and opportunities for building on those efforts.

(Alignment with MSU Choosing Promise goals 3.2)

<u>Participants</u>: All faculty and staff provide feedback; communication director helps adjust COA/MAES communication in response to feedback.

Metrics: Results of the faculty and staff survey and associated data; altering (if necessary) strategies to increase communication frequency and effectiveness.

2. Develop annual "State of Strategic Plan Progress" reports to update faculty and staff about the progress being made on the actions laid out with the strategic plan. <u>Participants:</u> COA/MAES leadership team (Dean's office; department heads) and communications director.

<u>Metrics</u>: Increased accountability to faculty and staff, greater transparency, and buy-in from faculty/staff of the collective efforts placed into developing the strategic plan.

## **FOCUS AREA 7: TRANSPARENT AND EFFECTIVE COMMUNICATION GOAL:** ENHANCE THE QUALITY OF OUR COMMUNICATION INTERNALLY AND EXTERNALLY

3. Improve the presentation quality, layout optimization, navigability, and searchability of the COA and MAES websites to: (a) improve external and internal users to more effectively understand the breadth of MAES research and locate areas of interest, (b) clarify and identify areas of expertise of MAES faculty at MSU and within countries, (c) determine natural research complementarities across departments, and (d) enhance the level of engagement by potential industry partners.

(Alignment with MSU Choosing Promise goals 2.2, 3.2, 3.3)

<u>Participants</u>: All faculty and staff provide feedback; communication director helps adjust COA/MAES communication in response to feedback.

<u>Metrics</u>: An aesthetically appealing, effective website that effectively communicates information and resources to external and internal audiences; a website that is part of an integrated effort to increase COA/MAES digital presence across numerous dimensions of communications (i.e., website, social media, print media); a database and effective (and easy) way to identify research interests and overlaps; enable external stakeholders to more effectively identify faculty and staff for enabling private-public relationships.

