

## REQUEST TO PLAN MEMORANDUM

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**DATE:** February 12, 2025

**TO:** Chief Academic Officers, Montana University System

**FROM:** Joe Thiel, Deputy Commissioner for Academic, Research, and Student Affairs

**RE:** March 2025 Request to Plan Proposals

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The campuses of the Montana University System have proposed new academic programs or changes under the Request to Plan process authorized by the Montana Board of Regents. The proposals are being sent to you for your review and approval. If you have concerns about a particular proposal, you should share those concerns with your colleagues at that institution and try to come to some understanding. If you cannot resolve your concerns, raise them at the Chief Academic Officer's conference call Wednesday, February 19<sup>th</sup>. Issues not resolved at that meeting should be submitted in writing to OCHE by noon on Friday, April 21, 2025. If no concerns are received, OCHE will assume that the proposals have your approval.

### **Requests to Plan**

#### **Montana State University Bozeman:**

- Request to plan a Bachelor of Science – Agricultural and Biosystems Engineering  
[Item #217-2010-R0325](#)
- Request to plan a Bachelor of Science – Optics and Photonics Engineering  
[Item #217-2011-R0325](#)

#### **The University of Montana Missoula:**

- Request to plan a Center for Hunting and Conservation  
[Item #217-1001-R0325](#)
- Request to plan an Institute for Positive Education  
[Item #217-1002-R0325](#)
- Request to plan the Montana Clinical Translational Research Center  
[Item #217-1003-R0325](#)
- Request to plan the Montana Public Health Training Center  
[Item #217-1004-R0325](#)

**Montana University System**  
**REQUEST TO PLAN FORM****ITEM 217-2010-R0325****Meeting Date: March 2025****Item Name: Request to plan a Bachelor of Science- Agricultural and Biosystems Engineering**Program/Center/Institute Title: **Bachelor of Science – Agricultural and Biosystems Engineering**Planned 6-digit CIP code: **14.0301**Campus, School/Department: **MSU Bozeman, College of Agriculture, Land Resources and Environmental Sciences**Expected Final Submission Date: **Spring 2025**Contact Name/Info: **Jennifer Thomson, [jennifer.thomson@montana.edu](mailto:jennifer.thomson@montana.edu), 406-994-6772**

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit

<http://mus.edu/che/arsa/academicproposals.asp>.

**1) Provide a description of the program/center/institute.****Program Overview:**

The proposed Agricultural and Biosystems Engineering program at Montana State University will integrate the expertise and resources of the College of Agriculture and the College of Engineering to address pressing agricultural and natural resource challenges. The program will prepare students to design and implement innovative solutions in precision agriculture, climate-smart farming/ranching practices, sustainable management of natural resources, agricultural processing systems, sensors, robotics, artificial intelligence, and automation in agricultural operations. Agricultural production and processing industries are experiencing rapid technological transitions due to advancements in automation, data-driven technologies, and sustainable practices. This new program will equip students with the skills and knowledge to lead and be part of these advancements, ensuring they are prepared for the evolving demands of the field addressing food, water and energy security.

**Program Structure:**

This interdisciplinary program will combine foundational engineering principles with applied agricultural sciences. Students will receive hands-on training through courses, research projects, internships with local farms/ranches, environmental industries and agribusinesses, and experiential learning opportunities at MSU's Agricultural Experiment Station and engineering laboratories.

Core topics will include:

- **Precision Agriculture:** Using GPS, GIS, sensors, robotics and AI driven big data analytics to evaluate spatiotemporal variability in the field and for efficient and site-specific farm, livestock and land management.
  - **Autonomous Systems:** Applying Automation, Robotics, and Decision Support Systems to production agriculture to improve efficiency and accuracy.
  - **Land and Resource Management:** Sustainable practices for land use and natural resources (ex, soil and water) management, by combining spatial science, design, and optimal data driven management strategies for long-term sustainability, resource quality and climate resilience.

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- **Artificial Intelligence and Big Data in Agriculture:** leveraging AI and big data to optimize agricultural operations, improve resource use, and increase productivity.
- **Agricultural Process Engineering:** Developing eco-friendly machinery, systems and processes to develop innovative higher value products from Montana grown agricultural commodities.
  - **Biobased products:** Methods and technologies for developing higher-value products such as food, feed, fuel and industrial products from agricultural sources and for assessing their quality.
  - **Post-harvest processing:** Efficient and sustainable methods and technologies for drying, storing, milling, and fractionation while protecting quality, yield and value.

#### Why This Program is Needed:

Agriculture accounts for a significant portion of Montana's economy, and there is growing demand for advanced engineering solutions to optimize resource use and improve productivity. Nationwide, agricultural and Biosystems engineering roles are expanding, with an 6-8% projected growth over the next decade.

<https://www.careerexplorer.com/careers/agricultural-engineer/>, <https://www.bls.gov/ooh/architecture-and-engineering/agricultural-engineers.htm>.

Locally, Montana agricultural producers and natural resource managers face unique challenges, such as managing limited water resources and adapting to climate variability, that require targeted innovations. Additionally, cow-calf operations and rangeland management are foundational to the beef industry, which is Montana's top agricultural revenue source. With over 1.25 million producing females (~23% of all beef cows in the Western US), Montana ranks as the 7th largest cow-calf producer in the U.S. and leads the Intermountain West ([McNew et al., 2023](#)). Most cow-calf production in Montana relies on year-round rangeland grazing, underscoring the State's commitment to sustainable cow-calf production on rangeland agroecosystems.

#### Partnerships and Impact:

This program will benefit from MSU's legacy as a land-grant university, leveraging its research centers and industry partnerships. It will aim to develop professionals who contribute to Montana's agricultural and natural resource sustainability while making an impact at the national and global levels.

#### Program Outcomes:

Graduates will be equipped to:

- Lead engineering projects in agribusiness, consulting firms, and government agencies.
- Be innovators developing and managing technologies and processes that support sustainable agricultural production and processing into higher value products.
- Engage in advanced research addressing agricultural and natural resources challenges.

This program aligns with MSU's mission to serve Montana's communities while fostering innovation and discovery in critical industries.

#### 2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).

The demand for trained Agricultural and Biosystems engineers is growing both in Montana and across the United States due to the critical role they play in addressing modern agricultural challenges. Agricultural and Biosystems engineers contribute to innovations in sustainable farming/ranching, natural resource management, farm/ranch automation,

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agricultural processing for value addition, and precision agriculture technologies, which are essential to meet increasing food production needs and environmental sustainability goals.

In Montana, agriculture is a cornerstone of the state's economy, with over 28,000 farmers and ranchers relying on advancements in agricultural research and technology to maintain productivity and competitiveness. Institutions like Montana State University's Agricultural Experiment Station are vital in applying engineering solutions to address local issues, such as water and chemical use efficiency and soil health management, showcasing the need for skilled professionals in the field. [https://americanprofessionguide.com/demand-for-agricultural-engineers/#google\\_vignette](https://americanprofessionguide.com/demand-for-agricultural-engineers/#google_vignette)

Nationwide, the Bureau of Labor Statistics projects an 8% job growth rate for Agricultural and Biosystems engineers from 2023 to 2033, faster than the average for all occupations. This growth reflects an increased demand for expertise in areas like automation, climate-resilient farming practices, and environmental impact reduction. Additionally, about 100 job openings per year are anticipated, driven by retirements and the expansion of roles in agricultural innovation. <https://www.careerexplorer.com/careers/agricultural-engineer/job-market/>, <https://www.bls.gov/ooh/architecture-and-engineering/agricultural-engineers.htm>

These trends underline the need for more educational and professional development opportunities to prepare the next generation of Agricultural and Biosystems engineers, who are essential for advancing both Montana's agricultural and natural resource economy and broader national food security efforts.

#### [Precision Ag Adoption](#)

The adoption of precision agriculture and other alternative practices is often lagging in wheat production systems, with only 20% adoption nationwide ([Precision Ag Adoption](#)). The technologies are often developed in corn and soybean, where we see 40% or higher adoption nationwide. Tools and methods for corn production do not translate into the production systems of Montana. Thus, we need this program to lead the development of systems that fit Montana's agriculture production systems.

Despite these limitations in technology, we are seeing a rapid increase in adoption across Montana with the counties of the Golden Triangle region pushing 40% adoption of precision agriculture practices much higher than the other wheat producing states indicated in the [Census of Agriculture](#). This adoption requires the next generation of students to be prepared to enter this industry.

The need for this program is strongly supported by Montana's agricultural industry organizations, which have expressed strong interest in developing a workforce equipped to engage with the changing face of agriculture. Groups such as the Montana Farmers Union, Montana Stock Growers, Montana Organic Association, and Montana Ag Business Association have highlighted the critical role of innovation in addressing challenges faced by Montana's diverse agricultural and natural resource systems. These organizations recognize the importance of training professionals who can bridge the gap between advanced technologies, such as precision agriculture and automation, and their practical application on Montana farms and ranches. Their support underscores the demand for a program that not only equips graduates with technical expertise but also ensures these technologies are tailored to meet the specific needs of Montana's producers, aligning with MSU's land-grant mission of serving the state's agricultural communities.

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**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

This program will utilize existing investments and currently ongoing efforts to increase expertise in Precision Agriculture, Autonomous Systems, and Value-Added processing of agricultural products, along with the strong foundation in the College of Engineering to design and implement this program. No additional faculty FTE are needed to initiate this program, but additional support will be needed as enrollment increases.

Two new teaching labs are planned – one for precision agriculture and one for agricultural product processing. A legislative request for an initiative in value added agriculture has been submitted for consideration in the 2025 legislative session, along with a request for a new precision agriculture field lab. The proposal for offering this program is not contingent on these legislative requests. The college will address additional needs as the program is developed and we anticipate some fund raising to support these needs once this request is approved.

**4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

No overlap has been found with existing programs, but there is an opportunity for interaction with the Applied Agriculture Technology program at MSU Northern with the potential for shared elective opportunities.

Course sharing with courses already in existence in the College of Agriculture and College of Engineering will cover most if not all the required curriculum of this program. Three new faculty members with expertise in precision agriculture were hired in Fall 2023. They are developing courses in precision agriculture as part of a minor in precision agriculture. These courses will be utilized in the new program. There is a strong history of research collaboration between the College of Agriculture and College of Engineering at MSU. This program will formalize educational collaboration between these colleges and will lead to expanded research collaboration.

**5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

Agriculture is a foundational pillar of Montana's economy, and MSU prioritizes applied research and education that directly benefit the state's farmers, ranchers, and agribusinesses. By addressing challenges like water resource management, sustainable farming, and precision agriculture, the program would enhance the productivity and sustainability of Montana's agricultural and natural resource systems, supporting the university's mission to advance the state's economy. This aligns to goal 2.1 and 2.2 in the MSU Strategic Plan.

MSU emphasizes cutting-edge research through its land-grant mission and its designation as a top-tier research university (R1). The program would bring together faculty and students from the Colleges of Agriculture and Engineering to tackle interdisciplinary research problems, such as developing climate-resilient agricultural technologies and improving resource efficiency. This collaboration would strengthen MSU's reputation for innovation in solving global agricultural challenges. This aligns with goal 2.3 in the MSU Strategic Plan.

MSU prioritizes providing students with hands-on, experiential learning. This program would integrate practical training through access to the Montana Agricultural Experiment Station, internships with regional agribusinesses, and engineering

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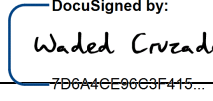
labs. Students would graduate with marketable skills, prepared to enter competitive industries and contribute immediately to the workforce. This aligns with goal 1.3 in the MSU Strategic Plan.

MSU has committed to addressing global challenges like sustainability and climate change. This program would contribute by developing technologies and practices that reduce environmental impacts, such as precision irrigation systems, renewable energy integration, and sustainable land-use planning. These efforts would support MSU’s broader sustainability goals and its impact on regional and global environmental resilience.

MSU’s land-grant mission emphasizes serving the needs of Montana communities. The program would directly engage with local farmers, ranchers, and agribusinesses to co-develop solutions tailored to Montana’s unique agricultural and natural resource conditions. This approach exemplifies MSU’s dedication to outreach and community-focused research.

With this program, MSU would not only address state-specific challenges but also establish itself as a leader in agricultural engineering education and innovation on a national and global scale.

This aligns with Goals 3.2 and 3.3 of the MSU Strategic Plan.

<b>Signature/Date</b>	
<b>Chief Academic Officer:</b>  <small>DocuSigned by: 212A28411AC04BD...</small>	2/3/2025   11:15 AM MST
<b>Chief Research Officer*:</b>	
<b>Chief Executive Officer:</b>  <small>DocuSigned by: 7D6A4CE96C3F415...</small>	2/3/2025   11:15 AM MST
<b>Flagship Provost**:</b>  <small>DocuSigned by: 212A28411AC04BD...</small>	2/3/2025   11:15 AM MST
<b>Flagship President**:</b>  <small>DocuSigned by: 7D6A4CE96C3F415...</small>	2/3/2025   11:15 AM MST
<small>*Center/Institute Proposal only **Not applicable to the Community Colleges.</small>	

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**REQUEST TO PLAN FORM****ITEM 217-2011-R0325****Meeting Date: March 2025****Item Name:** Request for authorization to plan a B. S. in Optic and Photonic EngineeringProgram/Center/Institute Title: **B.S. in Optical and Photonic Engineering**Planned 6-digit CIP code: **14.1003**Campus, School/Department: **MSU Bozeman, Norm Asbjornson College of Engineering/Electrical & Computer Engineering**Expected Final Submission Date: **June 2025**Contact Name/Info: **Todd Kaiser/ [tjkaiser@montana.edu](mailto:tjkaiser@montana.edu) / 406-994-7276**

This form is meant to increase communication, collaboration, and problem-solving opportunities throughout the MUS in the program/center/institute development process. The completed form should not be more than 2-3 pages. For more information regarding the program/center/institute approval process, please visit <http://mus.edu/che/arsa/academicproposals.asp>.

**1) Provide a description of the program/center/institute.**

This proposal seeks to authorize a 120-credit Bachelor of Science (B.S.) degree in Optical and Photonics Engineering administered within the current Electrical and Computer Engineering (ECE) department at MSU-Bozeman. It would be an Accreditation Board for Engineering and Technology (ABET) accredited program focusing on optical (light-manipulating systems) and photonics (generation, transmission and sensing of light) engineering.

**2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

Over [30 optics-related companies](#) within the Gallatin Valley have employed over 800 high-tech workers. It was ranked 8<sup>th</sup> in the top industry subsectors in the Bozeman area by the [2021 University of Montana Bureau of Business and Economic Research report \(https://bber.umt.edu/pubs/survey/MHTBASurvey2021.pdf\)](#). It also shows that members of the Montana High Tech Business Alliance expect to add 1,500 new jobs in 2021. Nationally, according to the [Bureau of Labor Statistics \(https://www.bls.gov/ooh/architecture-and-engineering/electrical-and-electronics-engineers.htm\)](#), employment of electrical and electronics engineers (which includes Optical and Photonic Engineers) is projected to rise 9% from 2023 to 2033. This is much faster than the average for all occupations.

**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

The Optical & Photonics Engineering degree is expected to attract nearly 40 majors per year. Half of these students would previously have declared physics, electrical engineering or chemistry as a major. The other half would be most likely new students who the university would attract with the new program. The following resource needs are anticipated:

- Support to teach three new courses each year. These would have to be developed and offered to meet the accreditation requirements: 1. Introduction to Optics and Photonics covering light, vision and photography, 2. Geometric Optics covering lenses and optical ray tracing, 3. Optoelectronics which would cover the generation and sensing of light.

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- At the current teaching workload these additional courses could be covered by one new tenure-track faculty line. Office space would be made available within the ECE department and optical research space already exists within the Norm Asbjornson College of Engineering.

**4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

The bulk of the required courses will come from the physical sciences, mathematics & statistics, as well as electrical engineering. A cross disciplinary optics minor with courses from the physics and chemistry departments already exists, also an A.A.S. in Photonics & Laser Technology from Gallatin College is available. Cooperation among all these organizations has been going on for some time.

No similar engineering programs exist at Montana Tech or within the Montana University System.

Optics and photonics are used across numerous research areas. Optical-based research collaborations have already been established in many areas between MUS institutions and industrial partners. Smart Optical Sensors would be developed by researchers with the skills developed in the Optical and Photonics Engineering program. This is just one of the most recent examples.

<https://www.mtnsfepscor.org/projects/smart-fires>

**5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

Montana State University already offers a Master of Science (M.S.) in Optics and Photonics and a minor in Optics. The B.S. in Optical and Photonics Engineering is the next step in expanding MSU's offerings in this critical arena, that will train a much-needed work force. It contributes to the MSU Academic Priority Plan and MSU's 2019 Strategic Plan: Choosing Promise as follows:

**GOAL 2.1: Enhance the significance and impact of scholarship**

Southwest Montana is already known as a thriving center of the photonics industry. Bringing in additional faculty to teach and conduct research in this area will cement the foundation that started decades ago. See the relevant news articles below.

<https://www.montana.edu/news/mountainsandminds/22864/becoming-a-world-leader>

<https://www.montana.edu/news/17746/msu-laser-technology-could-help-yellowstone-battle-invasive-trout>



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### GOAL 2.2: Expand interdisciplinary scholarship

The Optical and Photonics Engineering B.S. will continue to involve faculty from across the university and the state as these students will apply their skillset to applications within various interest areas, such as precision agriculture, forestry, and ecology.

<https://www.montana.edu/news/22928/montana-state-led-project-receives-20-million-for-prescribed-fire-research>

### GOAL 3.2: Grow mutually beneficial partnerships across Montana

Businesses within the Gallatin Valley and across the state are interested in hiring a trained workforce that has the skillset developed in the Optical and Photonics Engineering program.

<https://www.montana.edu/news/mountainsandminds/22869/evolution-of-a-vision>

<https://www.montana.edu/news/22147/self-driving-vehicle-tech-company-aurora-announces-facility-to-be-built-on-msu-innovation-campus>

<u>Signature/Date</u>	
<b>Chief Academic Officer:</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-radius: 15px; padding: 5px;"> <small>DocuSigned by:</small>    <small>212A28411AC04BD...</small> </div> <div style="text-align: right;">2/3/2025   11:15 AM MST</div> </div>
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<b>Chief Executive Officer:</b>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border-left: 1px solid black; border-right: 1px solid black; border-radius: 15px; padding: 5px;"> <small>DocuSigned by:</small>    <small>7D6A4CE96C3F415...</small> </div> <div style="text-align: right;">2/3/2025   11:15 AM MST</div> </div>
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**Flagship President\*\*:**

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\*Center/Institute Proposal only

\*\*Not applicable to the Community Colleges.

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**ITEM 217-1001-R0325**

**Meeting Date: March 2025**

**Item Name**

Program/Center/Institute Title: **Center for Hunting and Conservation**

Planned 6-digit CIP code:

Campus, School/Department: **WA Franke College of Forestry and Conservation**

Expected Final Submission Date: **September 2025**

Contact Name/Info: **Alan Townsend, Dean, FCFC / alan.townsend@umt.edu**

**1) Provide a description of the program/center/institute.**

This new center is a natural outgrowth of the W.A. Franke College of Forestry and Conservation's (FCFC) nationally renowned excellence in wildlife biology and conservation research and education. Hunting is a central and critical part of the North American model for land management and conservation, and was (and is) a direct contributor to improved management of both lands and wildlife that inhabit them. To this end, UM has long taught courses within the Wildlife Biology program (WBIO) on the essential role of hunting in conservation goals, and in 2018, began the launch of what is now the Wild Sustenance Program, a deeply experiential course on both the mechanics and broader issues surrounding hunting that is jointly run with support from the Rocky Mountain Elk Foundation (RMEF). This program is unlike any other in the country, and has attracted considerable national attention, as well as provided life-changing opportunities for students.

This proposed center builds on that rich history, to help cement and further elevate UM as a true national leader in this space. It will be housed within FCFC and be a platform for advancing research, education and outreach at the intersection of hunting and conservation.

**2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

Hunting is a critical part of Montana's economy and history, with estimates that its annual economic impact exceeds \$100 million (Montana Bureau of Labor & Industry). That figure does not include the myriad jobs that emerge from hunting in the state (and beyond), ranging from a host of private sector jobs to those within multiple state and federal agencies. Graduates of the Wildlife Biology program are employed across this sector in many ways and have a long history of shaping the landscape of hunting not just in Montana, but nationally.

As the state has grown in population and overall national attention, the pressures on our hunting resources have increased markedly. The need for sound science, education and broad stakeholder engagement is more pressing than ever. We view this center as being positioned to play a key role in meeting that need, in ways that would be unique across the nation. UM's excellence in research that includes both the natural and social science components of hunting, along with WBIO's long history of close partnerships with stakeholders across the state that span agency, NGO and private realms, allows us to create a center that we believe will have significant positive impacts not just in Montana, but on a national scale. That, in turn, can help ensure the sustainability of Montana's hunting opportunities, as well as the significant economy they support.

**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

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This Center is being supported via a partnership with the Rocky Mountain Elk Foundation (RMEF), building on their past support for both UM research and the Wild Sustenance Program. A large gift from RMEF would help fund the physical space for the Center, designed to be part of the new FCFC building, and underwrite the core programming and staffing of the Center for the first major period of its existence. We are also confident that this partnership and the Center will help leverage additional fiscal support as the Center becomes established and grows over time.

**4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

WBIO is already a unique multi-partner program at UM, and the Center will help advance the mission of the program in both research and education. Wildlife faculty routinely engage with and collaborate with others across the MUS system, and we believe this Center will only enhance those opportunities. It will also help in our collaborations with a broad range of entities that are very relevant to the MUS, from state agencies to NGOs to the private sector.

**5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

One of the priorities identified in both FCFC's strategic plan and in the Priorities for Action led by President Bodnar, is to develop and deepen partnerships that can enhance our core mission. This alliance with RMEF does exactly that, providing both financial resources to further elevate one of UM's real strengths, and a platform to engage not just in the state, but nationwide – also a key priority for the college and university. In addition, its focus on a mix of research, education and outreach around a complex and critical issue to the state is directly responsive to both UM's and MUS' missions, from helping to train future generations of leaders to helping to solve essential land management decisions that have broad consequences for the state's economy and reputation.

<u>Signature/Date</u>	
<b>Chief Research Officer*:</b> 	
<b>Flagship Provost**:</b> 	
<b>Flagship President**:</b> 	<b>01/22/2025</b>
<small>*Center/Institute Proposal only **Not applicable to the Community Colleges.</small>	

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**ITEM 217-1002-R0325**

**Meeting Date: March 2025**

**Item Name**

Program/Center/Institute Title: **Institute for Positive Education**

Planned 6-digit CIP code:

Campus, School/Department: **Phyllis J. Washington College of Education**

Expected Final Submission Date: **September 2025**

Contact Name/Info: **Dan Lee, Dean, / dan.lee@umontana.edu**

**1) Provide a description of the program/center/institute.**

The Institute for Positive Education at the Phyllis J. Washington College of Education will integrate and infuse the principles of positive psychology into teacher education, school counseling, and educational leadership at the University of Montana, throughout the state of Montana, and beyond.

**2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

Over the past 40 years, children's behavioral, emotional, and mental health has progressively deteriorated. By all measures, whether it is depression, anxiety, trauma, or suicide, behavioral and mental health problems have multiplied. The traditional deficit-and-remediation approach of identifying psychiatric diagnoses and providing treatments for specific problems can help individuals but is not adequate for addressing the current mental health crisis. We believe that by focusing on growing strengths, skills, and virtues, we can reduce behavioral and mental health problems among youth and adults in Montana.

**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

Through the University of Montana Foundation, the Phyllis J. Washington College of Education has received a \$9.4M gift to fund the Institute for four years. We will begin building on this initial funding through additional gifts and grants. The Institute will be a training and revenue resource for the University of Montana and the Phyllis J. Washington College of Education. The Institute will create positions that contribute to teacher education and education across other disciplines. Through collaboration, the Institute will formulate and submit research and service grant proposals that bring in revenue and further deepen the University of Montana's reputation as a leader in the positive education movement. Overall, our goals include having the Phyllis J. Washington College of Education at the University of Montana become the national and world leader in positive education.

**4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

Our primary collaborative academic partners will be from the Phyllis J. Washington College of Education. Specifically, we will work with the Department of Teaching and Learning, the Department of Counseling, and the Department of Educational Leadership to develop educational modules and elective or required courses to integrate into course curricula across the educational disciplines.

In addition, we will seek collaborative academic partners across the University of Montana campus. Specifically,




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we have already initiated conversations about initiating a collaborative 300-level positive psychology course through the Davidson Honors College. However, the collaborative potential of positive psychology and positive education principles is extensive. Positive psychology concepts are derived from psychology and have already been integrated into Business and Business Education. We also see great potential in working with Performing Arts, Journalism, and Communication Studies to use theatre and media-based strategies for communicating positive psychology principles to larger audiences. We have designated funds in our \$9.4M gift from the Dennis and Phyllis Washington Foundation to incentivize faculty across campus to collaborate with us on academic and research activities.

A foundational principle of the Institute is that we are "better together." Consequently, through work we have already begun (linked to a grant from the Arthur M. Blank Family Foundation), we have many existing collaborative and service relationships with agencies and organizations. These collaborative and service relationships include the following. However, we will continue to broaden our collaborative relationships—and have a designated and funded "Community Liaison" position that will specifically be oriented to outreach and collaboration.

**5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

The institute aligns with the UM Priorities for Action. For the past 18 months, the dean, professors, and representatives from the UM and Washington Foundations have collaborated to determine the best approach to addressing the emotional health needs of children and adolescents in Montana. After extensive deliberation and research, the group concluded that positive psychology and positive education offer the most promising framework to tackle this pressing issue on a large scale. This proposal for an Institute for Positive Education and the successful proposal for a \$9.4M gift from the Washington Foundation are both fully supported by the University of Montana President, Provost, and Dean of the Phyllis J Washington College of Education.

<b>Signature/Date</b>	
<b>Chief Research Officer*:</b>	
<b>Flagship Provost**:</b>	
<b>Flagship President**:</b>	 <b>01/22/2025</b>
<small>*Center/Institute Proposal only **Not applicable to the Community Colleges.</small>	

**Montana University System**  
**REQUEST TO PLAN FORM**

**ITEM 217-1003-R0325**

**Meeting Date: 3/13/2025**

**Item Name**

Program/Center/Institute **Montana Clinical Translational Research** Planned 6-digit CIP code: **511402**  
Title: **Center**

Campus, **School of Public and Community**  
School/Department: **Health Sciences** Expected Final Submission Date: **1/1/2025**

Contact Name/Info: **Tony Ward ([Tony.ward@umontana.edu](mailto:Tony.ward@umontana.edu))**

**1) Provide a description of the program/center/institute.**

With funding from the National Institutes of Health, the Montana Clinical and Translational Research Center (Montana CTRC) aims to build clinical and translational research capacity at the University of Montana and with its clinical and public health partner organizations. The Montana CTRC has a goal of directly addressing health disparity issues throughout the state and improving the health of our communities.

**2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

The Montana CTRC will directly address the significant health disparities and lack of healthcare infrastructure in Montana's rural and underserved areas. With 64.1% of the state's population living in nonmetro regions, Montana faces unique challenges such as limited access to specialty care, high mortality rates from cardiovascular disease and suicide, and a lack of healthcare professionals, particularly in rural counties. These challenges are exacerbated by a shortage of healthcare providers, with nearly all counties designated as Health Professional Shortage Areas. Additionally, Montana lacks a public medical school, which further limits clinical and translational research opportunities. The Montana CTRC aims to build capacity for clinical and translational research, addressing these gaps by supporting local researchers, providing mentorship, and facilitating collaborations between academic institutions, healthcare providers, and public health agencies. This initiative will help address critical health issues, including chronic disease prevention, mental health, and substance use, by promoting evidence-based practices and research that are directly applicable to the needs of Montana's rural and tribal communities.

**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

Research funding is provided by the NIH over the next five years. We may need office space as we hire new staff and two new faculty over the next five years.



**Montana University System**  
**REQUEST TO PLAN FORM**

- 4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

The MCTRC will provide Pilot and Developmental project funding to researchers not only in different departments at the University of Montana, but also to researchers at our Partner Organizations throughout the state.

- 5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

With a focus on clinical and translational research, the Montana CTRC strengthens the university's reputation as a leader in rural and population health research. It fosters collaborations with prominent healthcare organizations and public health agencies throughout the state, allowing the university to address the pressing health disparities in Montana's rural and underserved communities.

The Montana CTRC leverages the Montana Public Health Training Center (MPHTC) to provide professional development and workforce training. This center benefits the university's faculty, staff, and students by offering training programs, webinars, and mentoring, which prepares them for careers in healthcare and public health. The training supports a pipeline of skilled researchers, benefiting both the College of Health and the institution overall.

The Montana CTRC will provide pilot / developmental funding to researchers from departments and schools at the University of Montana. Each funded pilot / developmental project will then be supported to seek additional funding to support a variety of research initiatives in the future. The Montana CTRC will bring in new research projects and funding, further enhancing the university's research profile and opening grant opportunities for faculty and students.

**Signature/Date**

**Chief Academic Officer:**

**Chief Research Officer\*:**

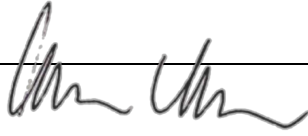


1/17/25

**Chief Executive Officer:**

**Montana University System**  
**REQUEST TO PLAN FORM**

**Flagship Provost\*\*:**



**1/17/25**

**Flagship President\*\*:**



**01/22/2025**

\*Center/Institute Proposal only

\*\*Not applicable to the Community Colleges.

Montana University System  
REQUEST TO PLAN FORM

ITEM 217-1004-R0325

Meeting Date:  
3/13/2025

Item Name

Program/Center/Institute Title: **Montana Public Health Training Center**

Planned 6-digit CIP code: **512201**

Campus, School/Department: **School of Public and Community Health Sciences**

Expected Final Submission Date: **1/6/2025**

Contact Name/Info: **Tony Ward ([Tony.ward@umontana.edu](mailto:Tony.ward@umontana.edu))**

**1) Provide a description of the program/center/institute.**

With funding from the Montana Department of Public Health and Human Services and the Montana Healthcare Foundation, the Montana Public Health Training Center (MPHTC) was created in 2019 with the vision to provide professional development opportunities for public health and healthcare professionals throughout Montana.

**2) Describe the need for the program/center/institute. Specifically, how the program/center/institute meets current student, state, and workforce demands. (Please cite sources).**

At the request of the Montana Department of Public Health and Human Services (DPHHS, the State Health Department), the MPHTC was created in 2019 to address the professional development needs of public health and healthcare professionals throughout Montana and our region. Exacerbated by the Covid-19 pandemic, the public health / healthcare workforce has faced significant external and internal challenges resulting in staff turnover more than two times greater than normal turnover. Talent loss and long vacant positions impacts public health service delivery and quality of services. Offering training opportunities for Montana public health workers has proven to increase knowledge, productivity, and performance of the public health workforce. Training opportunities provide evidence-based ways to meet wants, needs, and requirements of the workforce. The MPHTC supports goals and objectives identified by the DPHHS, Montana Public Health System Improvement Plan and the Montana Public Health Workforce Development Plan.

**3) Describe any significant new resources (financial, staff, facility, new curricula) needed to launch and sustain the program/center/institute.**

Funding received from DPHHS covers most staff and personnel needs. However, as we continue to grow, we may need additional space to accommodate staff.




**4) Describe any efforts or opportunities you have identified for collaboration either within the institution or between MUS institutions (i.e. articulation, course-sharing, research collaboration).**

The MPHTC has used numerous faculty and staff across UM to provide trainings.

**Montana University System**  
**REQUEST TO PLAN FORM**

**5) Describe how the program/center/institute fits with the institutional mission, strategic plan, existing institutional program array, and academic priorities as described in the most recent Academic Priorities and Planning Statement.**

Similar to the UM academic mission of training students, the MPHTC provides professional development trainings to the public health and healthcare workforce across Montana. In addition, additional funding has been provided to the MPHTC to address health issues across the state including workplace wellness / mental health. The MPHTC also maintains a jobs board that contains the latest public health jobs in the state. This jobs board is advertised to UM SPCHS students as they enter the public health workforce in Montana.

<u>Signature/Date</u>	
<b>Chief Academic Officer:</b>	
<b>Chief Research Officer*:</b>	
	1/17/25
<b>Chief Executive Officer:</b>	
<b>Flagship Provost**:</b>	 1/17/25
<b>Flagship President**:</b>	 01/22/2025
*Center/Institute Proposal only	
**Not applicable to the Community Colleges.	