State the mission, objectives, and primary functions of this unit: The proposed Center for Translational Medicine has been approved by the Deans, Provost and Faculty Senate (Sept 21, 2017). Center approval from the UM President and BOR is pending.

The purpose of the proposed Center for Translational Medicine at the University of Montana is to establish a cross-department and -college multi-disciplinary research center to assist faculty, staff and students in the translation of research ideas from bench to bedside. In this respect, translational research provides an avenue through which basic science discoveries in the biomedical sciences can be "translated" into applicable therapeutics, diagnostics, and/or processes that directly impact health care. In many instances the products/intellectual property of translational research can also be commercialized to the benefit of the University and the regional economy. The Center will work across the Montana University System (MUS) to facilitate the ability of University researchers to better advance the clinical and/or commercial potential of their basic science discoveries. The Center will promote the expansion of educational programs in translational medicine and career development opportunities in the healthcare and pharmaceutical industries. The Center seeks to strengthen and expand entrepreneurial programs at the University and build a new community to meet challenges and adapt to the changing healthcare/biotech employment and research funding landscape. This new culture and community will prepare students for a career in the biotechnology or health care industry and open doors to new sources of revenue in support of translational research and education in the MUS.

Identify the primary users of the unit: The proposed Center for Translational Medicine currently includes 30 Faculty affiliates from various departments and colleges across the University of Montana including Biomedical and Pharmaceutical Sciences, Chemistry and Biochemistry, Division of Biological Sciences, Mathematical Sciences, Computer Science, and the School of Business Administration. Users of the Center for Translational Medicine will include faculty, staff and students from across campus and throughout the MUS with an interest in translational medicine. The Center will be a key interface for external industry partners, collaborations and health care providers interested in programs supported through the Center.
Complete the FTE Detail Excel spreadsheet provided in the link below:
17Admin45_CompletetheFTEDetailExcelspreadsheetprovidedinthelinkbelow_0927012602.pdf

Using the space below, address any issues with your FTE Detail Sheet.: The proposed Center for Translational Medicine does not currently employ personnel although the datasheet shows 12.0 FTE for 2017. All Faculty affiliates of the Center and their Contract Professional staff have appointments in their respective academic units and not within the Center. This number should be 0 FTE for FY16 and FY17.

The CTM does not use General Funds to support programs or operations. 100% of revenue to support the CTM programs and operational expenses is derived from grants, contracts or corporate partnerships secured through the Center. The CTM is revenue positive for the University of Montana through the return of indirect funds from awarded grants and contracts.

The attached FTE Detail Excel spreadsheet does show SPABA revenue or expense for FY16 or FY17. The CTM Index recorded the following revenue and expenses in these fiscal years. No income or expenses were recorded prior to FY16.

<table>
<thead>
<tr>
<th>SPABA</th>
<th>FY16</th>
<th>FY17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$127,119</td>
<td>$285,474</td>
</tr>
<tr>
<td>Expense</td>
<td>$3,644</td>
<td>$85,327</td>
</tr>
</tbody>
</table>

Finance: Budget and Financial Planning

Research: Pre-award, Post-award, Research compliance

Communications: Website Maintenance/Development, Event Planning

Development: Fundraising

Student Services: Career Service Advising

Criteria 1. - Bullet 1.: The strategic directions for the Center are aligned with the University of Montana 2020 Strategic Plan of Building a University for the Global Century. The Center will contribute to academic programs at the University and advance the underlying values of leadership, engagement, diversity and sustainability as part of a new community at the University of Montana focused on Translational Medicine.

- Partnering for Student Success/Dynamic Learning Environment
  - Enable and empower Faculty with the tools and information necessary to support a strong culture of academic excellence and leadership in translational medicine.
  - Actively seek external funding to support active learning and student undergraduate research experiences to provide undergraduates with the skills necessary to succeed in the biotechnology or health care industry.
  - Improve graduate student recruitment and sustainability through cross-department coordination and securing programmatic training grants in translational medicine.

- Education for the Global Century
  - Establish Center-funded travel grant program for students and postdocs to present research at local, national and international scientific meetings.
o Strengthen foundational academic programs in translational medicine to prepare students for a career in the biotechnology, pharmaceutical or health care industry.

- Discovery and Creativity to Serve Montana and the World
  - Enhance contributions by faculty and students through research by coordination of multidisciplinary resources to facilitate increased output and efficiency
  - Advance today’s discoveries to create tomorrow’s products
  - Encourage and foster an interdisciplinary research culture through cross-departmental funding applications and pharmaceutical partnership agreements.
  - Establish pilot grant program to develop new collaborative research opportunities

- Dynamic Learning Environment
  - Secure external partnerships to enhance student research participation through internships and research initiatives focused on dynamic hand-on learning.

Criteria 1. - Bullet 2.: The coordination and expansion of research and educational opportunities in translational medicine at the University of Montana aligns with the MUS Research Initiative to leverage university-based research to strategic advancements for Montana’s economy. The new educational interface and research community focused on translational medicine will establish new collaborative research opportunities and increase research funding through competitive grant applications, pharmaceutical industry partnerships, foundation support and increased licensing revenue whereby supporting multiple departments, colleges and institutions across campus. Expanded educational opportunities in translational medicine will prepare students for a career in biotechnology industry, fill a current gap in Montana’s workforce development, and provide expanded opportunities for recruitment of new students. The loss of these resources would have a negative impact on research funding, student education in biotechnology, faculty engagement and future growth at the University of Montana.

Criteria 2. - Bullet 1.: The CTM is a proposed center and therefore past trends in demand for unit services are not available and most Center initiatives have not yet started. To date, 30 UM Faculty from across campus have signed-up as founding members of this proposed center and over $25 million in new research grant/contract proposals have been submitted through the Center in FY17/18. The CTM will be 100% funded through successful grant applications, industry partners and licensing/contract revenues. Future success will be measured by return on investment from new grants, contracts and licensing revenues, faculty participation in the CTM, and student engagement through CTM sponsored internships and educational programs.

Criteria 2. - Bullet 2.: The CTM is a proposed center and therefore past trends in demand for unit services are not available. The CTM is being established in alignment with the MUS Research Initiative to leverage university-based research to strategic advancements for Montana’s economy. We anticipate rapid expansion beyond the University of Montana to include faculty, staff and students from other MUS campuses following Board of Regents approval of the new center.

The CTM is actively engaged in discussions and/or licensing negotiations with multiple corporate partners (Amgen, GSK, Inimmune, Merck) interested in technology, people and translational projects developed at UM.

Criteria 3. - Bullet 1.: N/A- This is a proposed new Center so internal assessments and/or comparisons with national or industry benchmarks are not yet available.

Criteria 3. - Bullet 2.: The Center for Translational medicine includes over 30 UM Faculty affiliates from across campus, each with their own academic unit standards and respective leadership and service requirements. The CTM hosted and directed a Faculty Development Series workshop in translational
Criteria 3. - Bullet 3.: The CTM is currently managing $22 million in peer-reviewed research contracts awarded from NIH. These contracts directly support 20 University employees, 2 graduate students, 3 postdoctoral fellows and 3 undergraduate interns. Indirect returns from these contracts support university operations across campus. The high level of productivity and quality of research performance on these contracts resulted in an additional $25 million in research grants and contracts submitted through the CTM in FY17/18 awaiting award notifications from NIH.

Criteria 3. - Bullet 4.: The CTM is not directly involved in teaching as part of its mission. One of the stated objectives of the proposed Center is to work with colleges, programs and departments to improve and expand undergraduate and graduate student course curriculum to prepare students for a careers in the biotechnology and pharmaceutical industry. In addition, the CTM will support undergraduate and graduate research through travel grants, internships and cross-college and –department external funding opportunities (training grants, private foundation support, biotech/pharma partnerships, etc).

Criteria 4. - Bullet 1.: No general funds are used or requested to support the proposed Center. The CTM is 100% supported through indirect returns from grants, contracts and corporate sponsorships secured through the Center. No revenue or expenses were recorded prior to FY16. The main categories of expense for FY16/17 included pilot research project grants, research equipment, conference travel, and equipment maintenance.

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Criteria 4. - Bullet 2.: NA- Anticipated income and expenses for the proposed Center have not changed.

Criteria 4. - Bullet 3.: The proposed Center for Translational Medicine has recruited 30 Faculty affiliates from various departments and colleges across the University of Montana including Biomedical and Pharmaceutical Sciences, Chemistry and Biochemistry, Division of Biological Sciences, Mathematical Sciences, Computer Science, and the School of Business Administration. Future affiliates and users of the Center for Translational Medicine will include faculty, staff and students from across campus and throughout the MUS with an interest in translational medicine. The Center will be a key interface for external industry partners, collaborations and health care providers.

The impact of these efforts will be realized over the next 5 years following CTM approval by the BOR.

Criteria 4. - Bullet 4.: The CTM is currently managing over $22 million in peer-reviewed research grants and contracts. Indirect returns from these contracts and grants support both CTM programs and other units across campus. 100% of the unit’s expenses are supported by external grant/contract revenue.

The high level of productivity and quality of research performance through the Center in FY16 resulted in an additional $25 million in research grants and contracts submitted through the CTM in FY17/18.

Criteria 5. - Bullet 1.: The proposed Center for Translational Medicine will contribute the UM Strategic Vision: Creating Change Together through the following planned activities.
Engage Students Where They Are/Reinvent the Heart of the Curriculum

1. Investment in Faculty-Student mentoring through research internship programs (experiential learning) providing additional undergraduate research opportunities.
2. Work with colleges, programs and departments to improve and expand undergraduate and graduate student course curriculum to prepare students for a careers in the biotechnology and pharmaceutical industry.
3. Provide career advising for both undergraduate and and graduate students in translational medicine and the biotechnology industry.

Invest in People

1. Provide opportunities for Faculty, Staff and Students to develop the leadership skills and knowledge necessary for a career in the biotechnology or pharmaceutical industry.
2. Administer pilot project grants to support new investigators or to develop new collaborative research opportunities.

Partner with Place

1. Establish a new community and culture of excellence in translational science.
2. Expand funding opportunities through state and federal program grants/contracts, private foundation support, pharmaceutical industry partnership agreements and intellectual property licensing.
3. Coordinate activities with and serve as a conduit for interactions with the Office of Technology Transfer, Montana World Trade Center, Blackstone Launchpad and Pharmaceutical Industry Partners

Foster Knowledge Creation and Innovation

1. Assist Faculty, Staff, Students and the University Office of Technology Transfer with intellectual property reviews, patent filings and licensing/partnership negotiations.
2. Provide a centralized resource for all aspects of translational science (pre-clinical study design, GLP/GMP scale-up and process chemistry, formulation development, assay qualification and validation, safety assessment), intellectual property (data integrity and management, patent strategy, portfolio review, market analysis) and regulatory filings (IND applications)

Criteria 5. - Bullet 2.: There are no other units on campus (or within MUS) that provide similar services to what is proposed for the CTM.

Criteria 5. - Bullet 3.: With additional resources the unit could more rapidly launch planned initiatives resulting in a higher return-on-investment for the University of Montana, increased student educational opportunities in translational medicine, improved student recruitment/retention and higher levels of externally funded research programs.