# THE UNIVERSITY OF WYOMING BOARD OF TRUSTEES' REPORT AND SUPPLEMENTAL MATERIALS

October 13, 2021 Conference Call Meeting

The final report can be found on the University of Wyoming Board of Trustees Website at <a href="http://www.uwyo.edu/trustees/">http://www.uwyo.edu/trustees/</a>

#### University of Wyoming Mission Statement (July 2017)

We honor our heritage as the state's flagship and land-grant university by providing accessible and affordable higher education of the highest quality; rigorous scholarship; the communication and application of knowledge; economic and community development; and responsible stewardship of our cultural, historical and natural resources.

In the exercise of our primary mission to promote learning, we seek to provide academic and co-curricular opportunities that will:

- Graduate students who have experienced the frontiers of scholarship and creative activity and who are prepared for the complexities of an interdependent world;
- Cultivate a community of learning energized by collaborative work among students, faculty, staff and external partners.
- Nurture an environment that values and manifests diversity, internationalization, free expression, academic freedom, personal integrity and mutual respect; and
- Promote opportunities for personal health and growth, physical health, athletic competition and leadership development for all members of the university community.

As Wyoming's only public university, we are committed to scholarship, outreach and service that extend our human talent and technological capacity to serve the people in our communities, our state, the nation and the world.

# TRUSTEES OF THE UNIVERSITY OF WYOMING AGENDA October 13, 2021 Conference Call Meeting

*Note: Only topics that have support materials provided in advance of the meeting are contained within this report. Topics that will be discussed with only a verbal report do not have information included.* 

# WORK SESSIONS

UW Regulation Review Committee (ad hoc committee); Kermit Brown (Chair)	
Consideration and Action: Modifications to UW Regulations	
UW Regulation 9-1 (University Intellectual Property)	4
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# AGENDA ITEM TITLE: <u>Approval of modifications to UW Regulation 9-1 (University</u> <u>Intellectual Property)</u>, Brown/Evans

#### SESSION TYPE:

- $\Box$  Work Session
- $\Box$  Education Session
- □ Information Item
- $\boxtimes$  Other:

[Committee of the Whole – Items for Approval]

#### APPLIES TO STRATEGIC PLAN:

- $\boxtimes$  Yes (select below):
  - □ Driving Excellence
  - □ Inspiring Students
  - □ Impacting Communities
  - High-Performing University
- □ No [Regular Business]

Attachments are provided with the narrative.

# EXECUTIVE SUMMARY:

At the September 2016 Board of Trustees meeting, the Board approved review by UW Administration of UW's current regulatory structure, to include the following:

- 1) Phasing out presidential directives;
- 2) Defining regulation versus policy/procedure;
- 3) Creating a new "look" and format for the regulations; and
- 4) Updating the substance of the regulations, policies, and procedures as needed, including determining whether there are any substantive gaps.

At the January 2017 Board of Trustees meeting, the University proposed 12 sections for the new *Governing Regulations and Standard Administrative Policies and Procedures website.* 

Section 1: Governance and Structure

- Section 2: Academic Affairs
- Section 3: Athletics
- Section 4: Diversity and Equal Opportunity
- Section 5: Employment and Ethics
- Section 6: Facilities
- Section 7: Finance and Business
- Section 8: Information Technology
- Section 9: Research and Economic Development
- Section 10: Safety and Security
- Section 11: Student Affairs
- Section 12: University Relations

The new structure will involve three levels of policies:

- 1) Governing Regulations (Level A)
- 2) Standard Administrative Policies and Procedures (Level B)
- 3) Department/Unit Administrative Policies and Procedures (Level C)

Attached is the following Section 9 Research regulation (with a summary of the proposed modifications):

• UW Regulation 9-1 (University Intellectual Property): Modifications to account for the changing landscape of intellectual property and to provide clarity to all University

employees regarding ownership over patentable and copyrightable creations, academic course materials, and scholarship.

To facilitate review of this Regulation, Interim President Neil Theobald charged a Working Group to develop recommendations with respect to University intellectual property. The Working Group's recommendations were incorporated into the final version, except for the section on distribution, which was modified to include a tiered structure. Importantly, this structure still captures the Working Group's recommendation to retain the 60% distribution to the creator, which is an important tool for recruitment of high-level academic talent to the institution.

Per the routing process for UW Regulations, the proposed modifications to the regulations were provided to the President's Cabinet, Deans and Directors, Faculty Senate, Staff Senate, ASUW, and the Internal Auditor. Faculty Senate provided feedback on May 17, 2021. Additional edits were incorporated July 2021.

The Trustees Regulation Committee discussed this item at the August 2021 Board of Trustees conference call. It was tabled to allow for review of Trustee True's question related to expenses. The Regulation Committee incorporated additional edits in section VI.A.1.

#### PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

Proposed edits to UW Regulation 9-1 were discussed at the August 2021 Board of Trustees Conference Call.

#### WHY THIS ITEM IS BEFORE THE BOARD:

UW Regulation 1-101 requires that the Board approve modifications to UW Regulations.

# ACTION REQUIRED AT THIS BOARD MEETING:

Board approval, modification, or disapproval of the recommended modifications to the Regulations.

PROPOSED MOTION: "I move to authorize modifications to UW Regulation 9-1, as presented to the Board"

# PRESIDENT'S RECOMMENDATION:

The President recommends approval.

# UNIVERSITY OF WYOMING REGULATIONS

**Subject:** University Intellectual Property **Number:** UW Regulation 9-1



# I. GENERAL INFORMATION

The Provost and Vice President for Academic Affairs and the Vice President for Research and Economic Development are the University of Wyoming officers responsible for articulating policy and procedures concerning patentable inventions and copyrightable works in which the University may have or assert an interest.

#### II. PURPOSE

To establish ownership of copyrights, protectable discoveries and other intellectual property rights and to provide guidelines for the distribution of income received for the dissemination of those works. While the University claims ownership of intellectual property on behalf of the State, the underlying purpose of such claim of ownership is an open and free atmosphere, where individuals are able to freely publish results obtained from this work. Research done primarily in anticipation of profit is incompatible with the aims of the University. However, the University recognizes that patentable inventions and copyrightable materials are conceived or created during the course of research, instruction, and study conducted by faculty and students. These policies have been established to ensure that inventions and materials in which the University may have an interest are utilized in a manner consistent with the public good.

# **III. POLICY OBJECTIVES**

The principal objectives of the University Intellectual Property Policy set forth herein include the following:

- **A.** To provide incentive to creative intellectual effort by University employees, students, and others associated with the University;
- **B.** To establish principles for determining the respective interests of the Creators, the University, and sponsors with respect to Intellectual Property;
- **C.** To enable the University to develop procedures by which the significance of Intellectual Property may be determined and, if practicable, commercially utilized;

- **D.** To provide the means for placing in the public realm the results of research, while safeguarding the interests of the Creator, the University, and the sponsor; and
- **E.** To recognize the right of the Creator to financial benefits, when applicable, from Intellectual Property.

#### **IV. DEFINITIONS**

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Academic Course Materials: Works created primarily for the instruction of students or for continuing education and certification programs. Such works may include, but are not limited to, slides and presentation content used in classes, class notes, exercises and assignments, syllabi and examinations. These works do not include software, and materials prepared with significant University resources and facilities including, but not limited to, laboratories, studios, specialized equipment, production facilities, or specialized computing resources.

Academic Personnel: Academic Personnel shall have the meaning assigned to it in UW Regulation 2-1.

**Creator:** An inventor as defined under the United States patent laws, an author as defined under the United States copyright laws, or other creator in accordance with the United States intellectual property laws.

**Intellectual Property:** Includes all works, work product, designs, developments, discoveries, improvements, inventions, composition of matter, machines, manufacture, materials, methods, processes, diagrams, documentation, reports, evaluations, creations, expressions, algorithms, computer programs, applications, specifications, upgrades, revisions, modifications, and related written or otherwise reproducible materials, whether patentable, copyrightable or not, and all forms of legally recognized intellectual property rights, including copyrights, patents, trade secrets, trademarks, service marks, logos, and other identifiers, mask works, plant variety protection and tangible research property, together with any associated goodwill, supporting technology or know-how.

**Research:** For purposes of this Regulation, "research" is the studious inquiry or examination conducted with the avowed purpose of creating and adding to the knowledge in a field and thereby advancing theory and principles; expansion of ideas, theories, and principles and the interpretation of developed information and the provision of further insights; or improvement and/or facilitation of the application and utilization of knowledge within an applied professional field.

**Software:** The source code and/or object code of computer applications and subroutine libraries.

**University Facilities:** Any facility, including equipment and material, available to the individual as a direct result of the individual's affiliation with the University, and which would not be available to a non-affiliated individual on the same basis.

**University Resources:** University facilities, equipment, funds, or funds under the control of or administered by the University but not to include: office space, library facilities, ordinary access to computers and networks, or salary.

**Works of Authorship:** Includes, but is not limited to: textbooks; scholarly articles; literary works; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculpture works, motion pictures and other audiovisual works; sound recordings; and architectural works.

# V. COVERAGE

The University's Intellectual Property policies contained herein apply to all University employees and students conducting research and development that furthers the University's mission and is for the public good. Subject to limited exceptions as described within this Regulation, "Work[s] made for hire," as that term is defined by the U.S. Copyright laws of 1976, are the sole and exclusive property of the University, and employees have no patent, copyright, royalty or any other interest in such work(s). The Intellectual Property policies of the University, as amended from time to time, shall be deemed to be a part of the conditions of employment of every University employee.

# VI. INTELLECTUAL PROPERTY OWNERSHIP

# A. Intellectual Property Generally

With the exception of patentable Intellectual Property not within the scope of the employee's duties and created on personal time, Works of Authorship, Academic Course Materials, and all other Intellectual Property as explicitly described in subsections VI(B) and (C) below; all Intellectual Property, including that which is patentable, or part thereof which results from research or other activities carried out at the University, or which is developed with the aid of the University's facilities or employees, or with funds administered by the University; is the property of the University of Wyoming, and, as a condition of employment, is hereby assigned by the Creator to the University in accordance with these policies. Income earned as a consequence of the Intellectual Property and/or licensing such Intellectual Property shall be distributed in accordance with this Regulation.

All Intellectual Property made or conceived of by University employees including

> those created on personal time but within the employee's scope of duties shall be disclosed in accordance with this Regulation, and the Creator for such invention or discovery shall adequately demonstrate the relative extent to which the Creator's personal time and resources and the University's resources, facilities, and materials were utilized. In each instance in which it is adequately demonstrated that such Intellectual Property was made exclusively on personal time and not within the scope of duties, utilizing no University resources, facilities or materials, the University shall acknowledge in writing that the Intellectual Property is the sole property of the Creator.

> If a Creator so desires, however, Intellectual Property made exclusively on personal time and not within the Creator's scope of duties, utilizing no University resources, facilities, or materials, may be assigned to the University for evaluation, formal registration, administration or protection whether through patent or other means of protection.

The University may choose at its discretion to discontinue patent prosecution or maintenance (or any other form of protection) of Intellectual Property for any reason. Some examples of why the University might choose to discontinue efforts to protect Intellectual Property include, but are not limited to, if the University believes that a discovery or invention is one that is non-patentable or that does not warrant further evaluation as to patentability, if a discovery or invention is returned to the University after negative evaluation by its patent evaluation agent(s), if any, or the University chooses not to pursue or maintain any other form of protection of Intellectual Property. After consultation with the Creator, the University may, in its sole discretion cause any or all rights which it may have to Intellectual Property to be released and transferred to the Creator (for example, the University may agree to coownership with the Creator) in exchange for reasonable consideration (as determined by the University) and/or recoupment of patent expenses spent on protecting the patentable Intellectual Property (including maintenance fees a patent or patents issued). In event of an assignment or release, the University shall retain a royalty-free perpetual non-exclusive license for the use of any such patentable Intellectual Property.

# 1. Income from Intellectual Property and/or Licenses

Income from Intellectual Property that is not outside of the scope of subsection A, and licenses will be distributed as allocated below. The allocation formula recognizes all forms of cash payments, including royalties and various fees from licensing. After recoupment of legal costs, and subtraction of certain costs outlined below, a percentage of the proceeds that the University receives from the licensing of Intellectual Property will be paid to the Creator, the Office of Research and Economic Development, and the University, as specified below.

> The Vice President for Research and Economic Development, in consultation with the President, will oversee the distribution of the University's funds according to a Standard Administrative Policy and Procedure (SAP), which will designate the distribution of these funds to the Creator's department, the Creator's college or school, and a fund dedicated to high priority strategic research initiatives.

> A deduction of fifteen percent (15%) to cover operating expenses incurred by the Wyoming Technology Transfer and Research Products Center will be taken annually from the gross license revenue. At the end of each fiscal year, funds exceeding the annual Wyoming Technology Transfer and Research Products Center budget will be moved into a fund dedicated to high priority strategic research initiatives, as determined by the Vice President for Research and Economic Development, in consultation with the President. Additionally, all out-of-pocket payments or obligations (and in some cases, a reasonable reserve for anticipated future expenses) attributable to protecting (including defense against infringement or enforcement actions), marketing, licensing or administering the Intellectual Property shall be deducted from such current or future income. Income then remaining is the net income, which is distributed as set forth below.

So long as the cumulative net income (i.e., the net income from all years) is less than or equal to five million U.S. dollars (\$5,000,000), then the distribution will be allocated as follows:

- Sixty percent (60%) of the net income to the Creator.
- Twenty percent (20%) of the net income to the Office of Research and Economic Development.
- Twenty percent (20%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds five million U.S. dollars (\$5,000,000) but is less than or equal to ten million U.S. dollars (\$10,000,000), then any further distribution will be allocated as follows:

- Fifty percent (50%) of the net income to the Creator.
- Twenty-five percent (25%) of the net income to the Office of Research and Economic Development.
- Twenty-five percent (25%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds ten million U.S. dollars (\$10,000,000) but is less than or equal to twenty million U.S. dollars (\$20,000,000), then any further distribution will be allocated as follows:

- Forty percent (40%) of the net income to the Creator.
- Eighteen percent (18%) of the net income to the Office of Research and Economic Development.
- Forty-two percent (42%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds twenty million U.S. dollars (\$20,000,000), then any further distribution will be allocated as follows:

- Thirty-five percent (35%) of the net income to the Creator.
- Thirteen percent (13%) of the net income to the Office of Research and Economic Development.
- Fifty-two percent (52%) of the net income to the University (distribution determined by an accompanying Standard Administrative Policy and Procedure as outlined above.)

If there is more than one Creator, the applicable royalty percentage will be divided equitably among the Creators. For the avoidance of doubt, to the extent a difference exists between the Creator(s) identified in the Invention disclosure and the Creator(s) identified in any resulting patent application, the latter shall control.

If there is more than one school, department, or center in which the Creator(s) serves, the applicable income will be distributed to the school, department, or center that administered the academic year salary at the time of the disclosure. The University will review the proposed distribution plan, in light of the declarations of department, school, and center affiliations declared at the time of Invention disclosure to the University as well as the sources of salary support at the time of disclosure. Income will be split equally among all Creators (unless otherwise stipulated on the disclosure form) and, where necessary, will be split among the departments, schools, or centers according to the source of salary support (unless otherwise stipulated on the disclosure form and agreed upon by all the affected unit heads). In the case of student Creators, distributions to departments and schools will be split according to the source of salary support for the student at the time of disclosure. In cases where students receive no salary, distributions will go to the department and school that housed the student's work. When multiple disclosures are used to develop a single patent or license, then the income is split equally across the disclosures unless a different distribution is agreed upon by all those affected (Creators, unit heads, etc.). In cases of dispute, the Vice President for Research and Economic Development, or designee, will mediate among the parties and, if necessary, propose a distribution plan for approval to the President.

If the invention, discovery, or other Intellectual Property is the result of sponsored

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research and the sponsor regulates the distribution of income, such specific regulations shall take precedence over University policy with respect to distribution of the license revenue.

With respect to any Intellectual Property in which another institution or an outside agency shall share in the income derived from the Intellectual Property rights, distribution of income shall be made first to the other institution according to agreed-upon terms, and then to the Creator according to this Regulation.

#### 2. Specific Conditions Governing Sponsored Research

#### a. Government Sponsored Research

Patents on inventions or other Intellectual Property arising from research financed by the United States Government are controlled by the terms of the supporting grants and contracts, and applicable Federal laws and regulations. Except as provided by Federal law or by government-supported grants or contracts, when no patent rights are claimed or when patent rights are waived by the United States Government, Intellectual Property arising from government-sponsored research are controlled by Intellectual Property (including those set forth in subsections VI(B) and VI(C)) policies set forth herein.

# b. Non-Government Sponsored Research

The University must ensure that its facilities and the results of the research of its employees and students are applied in a manner which best serves the interests of the public. Likewise, the legitimate interests of a private sponsor who provides financial or other support to research carried out by or through the University must be considered. The University will normally reserve ownership of patents on inventions and/or other Intellectual Property arising out of research supported in whole or in part by grants or contracts with nongovernmental organizations or firms. Contracts or agreements which are entered into between the University and nongovernmental organizations or agencies should contain clauses setting forth such a reservation, unless deviations therefrom are requested by the sponsor and approved by the Vice President for Research and Economic Development. In the interest of fair treatment to the sponsor and in consideration for such sponsor's investment, special provisions regarding Intellectual Property rights (including patent rights) may be negotiated by the University, provided that the University retains the perpetual, non-exclusive right to use the invention for its own research, educational, and service purposes, without

> payment of royalty fees. In such cases, in the interest of discharging the University's obligation to the public in the application of its facilities and its employees' and students' time and talent, the University will require the sponsor to use due diligence in the commercial use of the invention, and the University will retain the right to publish the results of the research involved after a period of time reasonably necessary to protect the rights of the parties and to allow for the filing of a patent application or to secure any other applicable intellectual property protections. Exceptions to this section may be authorized by the Vice President for Economic Development.

# B. Copyright Ownership

All copyrights in Works of Authorship, whose Creators are Academic Personnel, except for works made for hire, software and patentable Intellectual Property, remain with their Creators. The University hereby transfers any copyrights it may own in Works of Authorship to Academic Personnel who prepared the Works of Authorship. Works of authorship created by non-Academic Personnel within the scope of their employment are owned by the University. The University may execute a written agreement waiving its rights, if any, in and to such material. The distribution of royalties, if any, is a matter of arrangement between the Creator and his or her publishers or licensees. The University also supports the creation and dissemination of academic or scholarly publications for the purpose of open access, subject to the arrangement between the Creator and their publishers or licensees. Works of Authorship owned by the University including; works made for hire, software, or other patentable Intellectual Property shall be subject to these policies and may be disseminated through open access with the approval of the Vice President for Economic Development.

# 1. Computer Software

All copyrights in and to computer software, including but not limited to programs, operating systems, procedures, and associated manuals, which result from activities carried out at the University, and which are developed with the aid of or for use with University hardware shall be the sole property of the University of Wyoming. The terms and conditions regarding patentable Intellectual Property, including but not limited to the distribution of income, shall apply to computer software of the type described herein.

# 2. Academic Course Materials

The University makes no claim to copyright ownership for noncommissioned academic course materials initiated and completed by Academic Personnel. The

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University hereby transfers any copyrights it may own in Academic Course Materials to Academic Personnel who prepared the Academic Course Materials, except for those prepared with significant University resources and facilities. However, for those created within the employee's scope of duties, the University will claim a perpetual, nonexclusive, worldwide, royalty-free license to use the Academic Course Materials for any of the University's teaching and educational purposes as well as for administrative purposes for accreditation.

#### C. Service Mark, Trademark, and Trade Name Ownership

Service marks, trademarks and trade names with respect to products resulting from or arising out of research, instruction, or other activities carried out at the University or developed with the aid of its resources, facilities or staff, shall be the property of the University. Without express authorization from the President or the President's designee, no steps shall be taken to secure such trademarks, trade names or service marks by usage or registration. The University reserves the right to register such marks as it deems appropriate, and to license the use of such marks, provided that the income from such licensing shall be used to support the research and educational programs of the University as defined herein.

#### **D.** Students

Undergraduate and graduate students enrolled in degree or certificate programs at the University own the copyrightable and patentable Intellectual Property they create if it was created:

- 1. For a course in which the student is enrolled;
- **2.** During extracurricular activities directly unrelated to research projects being undertaken at the University;
- **3.** While using the resources and facilities of the University commonly provided for a student's use and for which a student has paid tuition and fees;
- **4.** While using resources and facilities of the University available to the non-University community with or without an associated fee;
- **5.** Or a combination of 1–4, unless:
  - **a.** The student is also an employee of the University either on a work-for-hire basis or as part of University faculty-led research and the patentable Intellectual Property is developed within the course and scope of his or her

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employment as stated in Section V above, in which case Subsection 1 above shall apply;

- **b.** The student participates in a University research project where ownership and control of the resulting patentable Intellectual Property rights created under the project have already been defined via agreement to a governmental, philanthropic, corporate, or other sponsor or collaborator;
- **c.** The student jointly creates the patentable Intellectual Property with a nonstudent, in which case Section VI excluding this subsection (D)—and applicable law dictate ownership of patentable Intellectual Property as if the student was a non-student described above in subsection (A).

#### VII. PUBLICATION

A major function of the University is the advancement and dissemination of knowledge. Any practice which unnecessarily restricts the publication of results of scholarly or scientific work is to be avoided. It is recognized, however, that the full development of useful Intellectual Property may be dependent upon the securing of patent protection which will enable the commercial utilization of the Intellectual Property. Accordingly, under certain circumstances it may be necessary to delay for a minimum period the publication of results of research.

If a sponsor proposes to support a research effort, and the rights to any patentable or copyrightable Intellectual Property resulting therefrom will belong to said sponsor, the research agreement with respect to publication shall include language to accomplish the following: First, the sponsor must agree that the results of the research may be published by the investigators. Second, to not jeopardize patent applications, the University and the investigators may agree that any proposed publication will be submitted to the sponsor with a written notice of intent to submit for publication. The notice will advise the sponsor that if, within a period of no more than ninety (90) days from the date of such notice, the sponsor fails to request a delay, the investigators and University shall be free to proceed immediately with the publication. If, however, the sponsor provides timely notice to the University that a delay is desired, the submission of the manuscript to a publisher or other public disclosure shall be withheld for the period requested, but in no event shall the total period of delay be longer than one (1) year following the date of the notice of intent to submit for publication. Such a period will permit the sponsor to have the necessary patent applications prepared and filed, and does not unduly restrict the dissemination of scientific knowledge. Exceptions to this section may be authorized by the Vice President for Economic Development.

#### VIII. AVOIDANCE OF CONFLICTS

University Intellectual Property

Conflicts involving Intellectual Property ownership may arise when University employees or students enter into personal consulting agreements with outside firms and organizations. The agreements which business firms generally wish to have executed by those who are to serve in a consulting capacity frequently contain provisions requiring the licensing or assignment of the consultant's Intellectual Property to that business firm. Such provisions may apply to areas in which the individual's University work lies, and thus may come into conflict with the terms and conditions of this policy.

Prior to signing any consulting agreement which deals with patent rights, trade secrets, or the like, if any University time, facilities, materials or other resources are to be involved in the carrying out of such consulting work, University employees or students must submit the proposed agreement to the Wyoming Technology Transfer and Research Products Center and obtain a waiver of University rights, or otherwise modify the agreement to conform with these policies.

# IX. DUTY TO DISCLOSE INTELLECTUAL PROPERTY

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All individuals whose Intellectual Property are covered by these policies have a duty to promptly disclose the same to the Vice President for Research and Economic Development through the Wyoming Technology Transfer and Research Products Center.

The duty of disclosure arises as soon as the individual has reason to believe, based on his or her own knowledge or upon information supplied by others, that the Intellectual Property may be subject to this Policy. Certainty about patentability or copyright ability is not required before a disclosure is made. Prior to any verbal or other disclosure of Intellectual Property, whether formal or informal, to a non-University third party, individuals must disclose the Intellectual Property to the Wyoming Technology Transfer and Research Products Center. Examples of disclosures to non-University third parties include, but are not limited to, potential non-University collaborators, conference presentations, poster sessions, journal publications, conference roundtable discussions, and discussions with potential third party sponsoring entities for support of continued work on the Intellectual Property.

Individuals shall execute such declarations, assignments, or other documents as may be necessary in the course of patent evaluation, registration, administration, or enforcement in order to ensure that title in such inventions shall be held by the University, or by such other parties as may be appropriate under the circumstances. Employees and students who do not promptly disclose shall be subject to disciplinary action.

#### X. WYOMING TECHNOLOGY TRANSFER AND RESEARCH PRODUCTS CENTER

The Wyoming Technology Transfer and Research Products Center shall review and recommend to the Vice President for Research and Economic Development or the Vice

President's designee the procedures for the implementation of these policies; shall resolve questions of Intellectual Property ownership that may arise between the University and its faculty, staff, or students; shall recommend to the Vice President for Research and Economic Development the expenditure of funds from patent and/or licenses; and shall make such recommendations as are deemed appropriate to encourage disclosure and to assure prompt and expeditious handling, evaluation, and prosecution of patent opportunities.

# XI. PATENT MANAGEMENT

The Wyoming Technology Transfer and Research Products Center, in consultation with the Office of General Counsel, is authorized to negotiate with reputable agencies or firms to secure arrangements for patent management, including competent evaluation of invention disclosures, expeditious filing of applications on patents, and licensing and administration of patents.

# XII. EXCEPTIONS

Exceptions to any of the above policies may be authorized by the President or the President's designee if on the basis of the evidence available, such exception is consistent with the University's responsibilities to the public interest.

Responsible Division/Unit: Office of Research and Economic Development

Source: None

Links: <u>http://www.uwyo.edu/regs-policies</u>

#### Associated Regulations, Policies, and Forms: None

#### History:

University 641, Revision 3; adopted 7/17/2008 Board of Trustees meeting Revisions adopted 5/10/2013 Board of Trustees meeting Revisions adopted 9/12/2014 Board of Trustees meeting Reformatted 7/1/2018: previously UW Regulation 3-641, now UW Regulation 9-1

# UNIVERSITY OF WYOMING REGULATIONS



Subject: Patents and Copyrights<u>University Intellectual Property</u> Number: UW Regulation 9-1

# I. GENERAL INFORMATION

The Provost and Vice President for Academic Affairs and the Vice President for Research and Economic Development isare the University of Wyoming officerofficers responsible for articulating policy and procedures concerning patentable inventions and copyrightable works in which the University may have or assert an interest.-

# I. POLICY

# The University is dedicated to instruction, research,

# II. PURPOSE

# **H.III. POLICY OBJECTIVES**

The principal objectives of the University patent and copyright policies<u>Intellectual Property</u> <u>Policy</u> set forth herein include the following:

- **A.** To provide incentive to creative intellectual effort by University employees, students, and others associated with the University;
- **B.** To establish principles for determining the respective interests of the inventors or

authors<u>Creators</u>, the University, and sponsors with respect to inventions, discoveries, or other creative works<u>Intellectual Property</u>;

- **C.** To enable the University to develop procedures by which the significance of inventions, discoveries and other creative works Intellectual Property may be determined and, if practicable, commercially utilized;
- **D.** To provide the means for placing in the public realm the results of research, while safeguarding the interests of the <u>inventor or authorCreator</u>, the University, and the sponsor; and
- **E.** To recognize the right of the <u>inventor or author Creator</u> to financial benefits, when applicable, from <u>Intellectual Property.</u>

# IV. DEFINITIONSan invention, discovery\_

Academic Course Materials: Works created primarily for the instruction of students or for continuing education and certification programs. Such works may include, but are not limited to, slides and presentation content used in classes, class notes, exercises and assignments, syllabi and examinations. These works do not include software, and materials prepared with significant University resources and facilities including, but not limited to, laboratories, studios, specialized equipment, production facilities, or specialized computing resources.

Academic Personnel: Academic Personnel shall have the meaning assigned to it in UW Regulation 2-1.

<u>Creator:</u> An inventor as defined under the United States patent laws, an author as defined under the United States copyright laws, or other creativecreator in accordance with the United States intellectual property laws.

**Intellectual Property:** Includes all works, work- product, designs, developments, discoveries, improvements, inventions, composition of matter, machines, manufacture, materials, methods, processes, diagrams, documentation, reports, evaluations, creations, expressions, algorithms, computer programs, applications, specifications, upgrades, revisions, modifications, and related written or otherwise reproducible materials, whether patentable, copyrightable or not, and all forms of legally recognized intellectual property rights, including copyrights, patents, trade secrets, trademarks, service marks, logos, and other identifiers, mask works, plant variety protection and tangible research property, together with any associated goodwill, supporting technology or know-how.

Research: For purposes of this Regulation, "research" is the studious inquiry or examination

# Draft 3-3-21 based on Working Group recommendations and President/Regulation Committee inputPageIncorporated Faculty Senate and Regulation Committee feedback 6-2-21Incorporated additional edits 7-12-21Incorporated additional edits 10-1-21FULL REDLINE

conducted with the avowed purpose of creating and adding to the knowledge in a field and thereby advancing theory and principles; expansion of ideas, theories, and principles and the interpretation of developed information and the provision of further insights; or improvement and/or facilitation of the application and utilization of knowledge within an applied professional field.

**Software:** The source code and/or object code of computer applications and subroutine libraries.

**University Facilities:** Any facility, including equipment and material, available to the individual as a direct result of the individual's affiliation with the University, and which would not be available to a non-affiliated individual on the same basis.

**University Resources:** University facilities, equipment, funds, or funds under the control of or administered by the University but not to include: office space, library facilities, ordinary access to computers and networks, or salary.

**Works of Authorship:** Includes, but is not limited to: textbooks; scholarly articles; literary works; musical works, including any accompanying words; dramatic works, including any accompanying music; pantomimes and choreographic works; pictorial, graphic, and sculpture works, motion pictures and other audiovisual works; sound recordings; and architectural works.

# HI.V. COVERAGE

The University's patent and copyrightIntellectual Property policies contained herein apply to all University employees and students conducting research and development that furthers the University's mission and is for the public good. Subject to limited exceptions as described within this Regulation, "Work[s] made for hire," as that term is defined by the U.S. Copyright laws of 1976, are the sole and exclusive property of the University, and employees have no patent, copyright, royalty or any other interest in such work(s). –The patent and copyrightIntellectual Property policies of the University, as amended from time to time, shall be deemed to be a part of the conditions of employment of every University employee.

# VI. INTELLECTUAL PROPERTY OWNERSHIP

# A. Intellectual Property Generally

**H.** With the exception of patentable Intellectual Property not within the scope of the employee's duties and created on personal time, Works of Authorship, Academic Course Materials, and all

other Intellectual Property as explicitly described in subsections VI(B) and (C) below; all Intellectual Property, including that which is patentable,

**Personal Time:** For purposes of this Regulation, an individual's "personal time" shall mean time other than that devoted to normal or assigned functions relating to teaching, research, extension, or service on University premises, or other functions in which University facilities are utilized.

**Research:** For purposes of this Regulation, "research" is the studious inquiry or examination conducted with the avowed purpose of creating and adding to the knowledge in a field and thereby advancing theory and principles; expansion of ideas, theories, and principles and the interpretation of developed information and the provision of further insights; or improvement and/or facilitation of the application and utilization of knowledge within an applied professional field.

**University Facilities:** Any facility, including equipment and material, available to the individual as a direct result of the individual's affiliation with the University, and which would not be available to a non-affiliated individual on the same basis.

#### HI. PATENT OWNERSHIP

With the exception of inventions or discoveries made on an individual's personal time, every invention or discovery or part thereof which results from research or other activities carried out at the University, or which is developed with the aid of the University's facilities or employees, or with funds administered by the University; is the property of the University of Wyoming, and, as a condition of employment, and in keeping with the Student Code of Conduct, is hereby assigned by the inventorCreator to the University in accordance with these policies. -Income earned as a consequence of patentingthe Intellectual Property and/or licensing such inventions or discoveriesIntellectual Property shall be distributed in accordance with Section VII, Income from Patents and/or Licenses.this Regulation.

<u>All\_Inventions\_or\_discoveriesIntellectual\_Property\_made\_or\_conceived\_of\_by</u> University employees or students which are<u>including those</u> created or developed entirely on personal time, and which do not involve <u>but within</u> the <u>use of University</u> resources, facilities or materials, shall be the exclusive property<u>employee's scope</u> of the employee or student.<u>duties</u>

<u>All-inventions or discoveries made or conceived of by University employees or</u> <u>students</u> shall be disclosed in accordance with <u>Section XII hereofthis Regulation</u>, and the <u>individual responsibleCreator</u> for such invention or discovery shall adequately demonstrate the relative extent to which the <u>inventor'sCreator's</u> personal time and resources and the University's resources, facilities, and materials were utilized. -In each instance in which it is adequately demonstrated that such <u>invention or</u> <u>discoveryIntellectual Property</u> was made exclusively on personal time <u>and not within</u> <u>the scope of duties</u>, utilizing no University resources, facilities or materials, the Draft 3-3-21 based on Working Group recommendations and President/Regulation Committee input Page 2 Incorporated Faculty Senate and Regulation Committee feedback 6-2-21 Incorporated additional edits 7-12-21 Incorporated additional edits 10-1-21 FULL REDLINE

University shall acknowledge in writing that the <u>inventionIntellectual Property</u> is the sole property of the <u>inventorCreator</u>.

If <u>an individuala Creator</u> so desires, however, <u>inventions or discoveriesIntellectual</u> <u>Property</u> made exclusively on personal time <u>and not within the Creator's scope of</u> <u>duties</u>, utilizing no University resources, facilities, or materials, may be assigned to the University for <u>patent</u> evaluation, <u>formal</u> registration, administration or <u>protection</u> <u>whether through patent or other means of</u> protection.

#### After consultation with the inventor, the

The University may, in choose at its sole discretion and upon such terms as it deems appropriate, cause any rights which it may have to a discovery discontinue patent prosecution or invention to be released and transferred to the inventor. Such action may be expected maintenance (or any other form of protection) of Intellectual Property for any reason. Some examples of why the University might choose to discontinue efforts to protect Intellectual Property include, but are not limited to, if the University believes that a discovery or invention is one that is non-patentable or that does not warrant further evaluation as to patentability, or-if a discovery or invention is returned to the University after negative evaluation by its patent evaluation agent(s), if any-, or the University chooses not to pursue or maintain any other form of protection of Intellectual Property. After consultation with the Creator, the University may, in its sole discretion cause any or all rights which it may have to Intellectual Property to be released and transferred to the Creator (for example, the University may agree to co-ownership with the Creator) in exchange for reasonable consideration (as determined by the University) and/or recoupment of patent expenses spent on protecting the patentable Intellectual Property (including maintenance fees a patent or patents issued). In event of an assignment or release, the University shall retain a royalty-free perpetual non-exclusive license for the use of any such invention or discoverypatentable Intellectual Property.

#### IV. INCOME FROM PATENTS AND/OR LICENSES

Whenever the rights in and to an invention or discovery or a work of authorship as described in Sections XV and XVI hereof are owned by the University, and the University patents, copyrights, sells, licenses or otherwise provides for use of such inventions, discoveries or works by an outside user, then any net income or royalties received by the University shall be distributed sixty percent (60%) to the inventor/author and forty percent (40%) to the University.

Of that amount retained by the University, one half shall be paid to the department or college in which the invention or discovery originated, and one half shall be paid into a University research and development fund, the purpose of which shall be to stimulate and encourage creative enterprise by University and students. Expenditures from this fund shall be authorized by the Vice President for Research and Economic Development after consultation with the Research Advisory Committee.

#### I. <u>SPECIFIC CONDITIONS GOVERNING SPONSORED RESEARCH</u>

#### **<u>1. Income from Intellectual Property and/or Licenses</u>**

Income from Intellectual Property that is not outside of the scope of subsection A, and licenses will be distributed as allocated below. The allocation formula recognizes all forms of cash payments, including royalties and various fees from licensing. After recoupment of legal costs, and subtraction of certain costs outlined below, a percentage of the proceeds that the University receives from the licensing of Intellectual Property will be paid to the Creator, the Office of Research and Economic Development, and the University, as specified below. The Vice President for Research and Economic Development, in consultation with the President, will oversee the distribution of the University's funds according to a Standard Administrative Policy and Procedure (SAP), which will designate the distribution of these funds to the Creator's department, the Creator's college or school, and a fund dedicated to high priority strategic research initiatives.

A deduction of fifteen percent (15%) to cover operating expenses incurred by the Wyoming Technology Transfer and Research Products Center will be taken annually from the gross license revenue. At the end of each fiscal year, funds exceeding the annual Wyoming Technology Transfer and Research Products Center budget will be moved into a fund dedicated to high priority strategic research initiatives, as determined by the Vice President for Research and Economic Development, in consultation with the President. Additionally, all outof-pocket payments or obligations (and in some cases, a reasonable reserve for anticipated future expenses) attributable to protecting (including defense against infringement or enforcement actions), marketing, licensing or administering the Intellectual Property shall be deducted from such current or future income. Income then remaining is the net income, which is distributed as set forth below.

So long as the cumulative net income (i.e., the net income from all years) is less than or equal to five million U.S. dollars (\$5,000,000), then the distribution will be allocated as follows:

- Sixty percent (60%) of the net income to the Creator.
- Twenty percent (20%) of the net income to the Office of Research and Economic Development.
- Twenty percent (20%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds five million U.S. dollars (\$5,000,000)

Draft 3-3-21 based on Working Group recommendations and President/Regulation Committee input Page 2: Incorporated Faculty Senate and Regulation Committee feedback 6-2-21 Incorporated additional edits 7-12-21 Incorporated additional edits 10-1-21 FULL REDLINE

but is less than or equal to ten million U.S. dollars (\$10,000,000), then any further distribution will be allocated as follows:

- Fifty percent (50%) of the net income to the Creator.
- Twenty-five percent (25%) of the net income to the Office of Research and Economic Development.
- Twenty-five percent (25%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds ten million U.S. dollars (\$10,000,000) but is less than or equal to twenty million U.S. dollars (\$20,000,000), then any further distribution will be allocated as follows:

- Forty percent (40%) of the net income to the Creator.
- Eighteen percent (18%) of the net income to the Office of Research and Economic Development.
- Forty-two percent (42%) of the net income to the University (distribution determined by an accompanying SAP as outlined above).

When the cumulative net income exceeds twenty million U.S. dollars (\$20,000,000), then any further distribution will be allocated as follows:

- Thirty-five percent (35%) of the net income to the Creator.
- Thirteen percent (13%) of the net income to the Office of Research and Economic Development.
- Fifty-two percent (52%) of the net income to the University (distribution determined by an accompanying Standard Administrative Policy and Procedure as outlined above.)

If there is more than one Creator, the applicable royalty percentage will be divided equitably among the Creators. For the avoidance of doubt, to the extent a difference exists between the Creator(s) identified in the Invention disclosure and the Creator(s) identified in any resulting patent application, the latter shall control.

If there is more than one school, department, or center in which the Creator(s) serves, the applicable income will be distributed to the school, department, or center that administered the academic year salary at the time of the disclosure. The University will review the proposed distribution plan, in light of the declarations of department, school, and center affiliations declared at the time of Invention disclosure to the University as well as the sources of salary support at the time of disclosure. Income will be split equally among all Creators (unless otherwise stipulated on the disclosure form) and, where necessary, will be split

> among the departments, schools, or centers according to the source of salary support (unless otherwise stipulated on the disclosure form and agreed upon by all the affected unit heads). In the case of student Creators, distributions to departments and schools will be split according to the source of salary support for the student at the time of disclosure. In cases where students receive no salary, distributions will go to the department and school that housed the student's work. When multiple disclosures are used to develop a single patent or license, then the income is split equally across the disclosures unless a different distribution is agreed upon by all those affected (Creators, unit heads, etc.). In cases of dispute, the Vice President for Research and Economic Development, or designee, will mediate among the parties and, if necessary, propose a distribution plan for approval to the President.

> If the invention, discovery, or other Intellectual Property is the result of sponsored research and the sponsor regulates the distribution of income, such specific regulations shall take precedence over University policy with respect to distribution of the license revenue.

With respect to any Intellectual Property in which another institution or an outside agency shall share in the income derived from the Intellectual Property rights, distribution of income shall be made first to the other institution according to agreed-upon terms, and then to the Creator according to this Regulation.

# 2. Specific Conditions Governing Sponsored Research

# a. Government Sponsored Research

Patents on inventions or other Intellectual Property arising from research financed by the United States Government are controlled by the terms of the supporting grants and contracts, and applicable Federal laws and regulations. –Except as provided by Federal law or by government---supported grants or contracts, when no patent rights are claimed or when patent rights are waived by the United States Government, patentsIntellectual Property arising from government---sponsored research are controlled by patentIntellectual Property (including those set forth in subsections VI(B) and copyrightVI(C)) policies set forth herein.

# b. Non--Government Sponsored Research

The University must ensure that its facilities and the results of the research of its employees and students are applied in a manner which best

> serves the interests of the public. -Likewise, the legitimate interests of a private sponsor who provides financial or other support to research carried out by or through the University must be considered. -The University will normally reserve ownership of patents on inventions and/or other Intellectual Property arising out of research supported in whole or in part by grants or contracts with nongovernmental organizations or firms. -Contracts or agreements which are entered into between the University and nongovernmental organizations or agencies should contain clauses setting forth such a reservation, unless deviations therefrom are requested by the sponsor and approved by the Vice President for Research Advisory Committee. and Economic Development. In the interest of fair treatment to the sponsor and in consideration for such sponsor's investment, special provisions regarding Intellectual Property rights (including patent rights) may be negotiated by the University, provided that the University retains the perpetual, non-exclusive right to use the invention for its own research, educational, and service purposes, without payment of royalty fees. -In such cases, in the interest of discharging the University's obligation to the public in the application of its facilities and its -employees' and students' time and talent, the University will require the sponsor to use due diligence in the commercial use of the invention, and the University will retain the right to publish the results of the research involved after a period of time reasonably necessary to protect the rights of the parties and to allow for the filing of a patent application, or to secure any other applicable intellectual property protections. Exceptions to this section may be authorized by the Vice President for Economic Development.

# **B.** Copyright Ownership

<u>All copyrights in Works of Authorship, whose Creators are Academic Personnel, except for works made for hire, software and patentable Intellectual Property, remain with their Creators. The University hereby transfers any copyrights it may own in Works of Authorship to Academic Personnel who prepared the Works of Authorship. Works of authorship created by non-Academic Personnel within the scope of their employment are owned by the University. The University may execute a written agreement waiving its rights, if any, in and to such material. The distribution of royalties, if any, is a matter of arrangement between the Creator and his or her publishers or licensees. The University also supports the creation and dissemination of academic or scholarly publications for the purpose of open access, subject to the arrangement between the Creator and their publishers or licensees. Works of Authorship owned by the University including; works made for hire, software, or other patentable Intellectual Property shall be subject to these policies</u>

and may be disseminated through open access with the approval of the Vice President for Economic Development.

# **<u>1. Computer Software</u>**

All copyrights in and to computer software, including but not limited to programs, operating systems, procedures, and associated manuals, which result from activities carried out at the University, and which are developed with the aid of or for use with University hardware shall be the sole property of the University of Wyoming. The terms and conditions regarding patentable Intellectual Property, including but not limited to the distribution of income, shall apply to computer software of the type described herein.

# 2. Academic Course Materials

The University makes no claim to copyright ownership for noncommissioned academic course materials initiated and completed by Academic Personnel. The University hereby transfers any copyrights it may own in Academic Course Materials to Academic Personnel who prepared the Academic Course Materials, except for those prepared with significant University resources and facilities. However, for those created within the employee's scope of duties, the University will claim a perpetual, nonexclusive, worldwide, royalty-free license to use the Academic Course Materials for any of the University's teaching and educational purposes as well as for administrative purposes for accreditation.

# C. <u>Service Mark, Trademark, and Trade Name Ownership</u>

Service marks, trademarks and trade names with respect to products resulting from or arising out of research, instruction, or other activities carried out at the University or developed with the aid of its resources, facilities or staff, shall be the property of the University. Without express authorization from the President or the President's designee, no steps shall be taken to secure such trademarks, trade names or service marks by usage or registration. The University reserves the right to register such marks as it deems appropriate, and to license the use of such marks, provided that the income from such licensing shall be used to support the research and educational programs of the University as defined herein.

# **D.** Students

> <u>Undergraduate and graduate students enrolled in degree or certificate programs at the</u> <u>University own the copyrightable and patentable Intellectual Property they create if it</u> <u>was created:</u>

- **1.** For a course in which the student is enrolled;
- 2. During extracurricular activities directly unrelated to research projects being undertaken at the University;
- 3. While using the resources and facilities of the University commonly provided for a student's use and for which a student has paid tuition and fees;
- **4.** While using resources and facilities of the University available to the non-University community with or without an associated fee;
- **5.** Or a combination of 1–4, unless:
  - **a.** The student is also an employee of the University either on a work-for-hire basis or as part of University faculty-led research and the patentable Intellectual Property is developed within the course and scope of his or her employment as stated in Section V above, in which case Subsection 1 above shall apply;
  - **b.** The student participates in a University research project where ownership and control of the resulting patentable Intellectual Property rights created under the project have already been defined via agreement to a governmental, philanthropic, corporate, or other sponsor or collaborator;
  - **c.** The student jointly creates the patentable Intellectual Property with a nonstudent, in which case Section VI excluding this subsection (D)—and applicable law dictate ownership of patentable Intellectual Property as if the student was a non-student described above in subsection (A).

# VII. PUBLICATION -

A major function of the University is the advancement and dissemination of knowledge. Any practice which unnecessarily restricts the publication of results of scholarly <u>or</u> scientific work is to be avoided. –It is recognized, however, that the full development of useful inventions or discoveries<u>Intellectual Property</u> may be dependent upon the securing of patent protection which will enable the commercial utilization of the <u>discoveries or inventions</u>. <u>Intellectual Property</u>. Accordingly, under certain circumstances it may be necessary to delay for a minimum period the publication of results of research.\_

-If a sponsor proposes to support a research effort, and the rights to any patentable inventionor copyrightable Intellectual Property resulting therefrom will belong to said sponsor, the research agreement with respect to publication shall include language to accomplish the following: -First, the sponsor must agree that the results of the research may be published by the investigators. Second, to not jeopardize patent applications, the University and the investigators may agree that any proposed publication will be submitted to the sponsor with a written notice of intent to submit for publication. -The notice will advise the sponsor that if, within a period of no more than ninety (90) days from the date of such notice, the sponsor fails to request a delay, the investigators and University shall be free to proceed immediately with the publication. -If, however, the sponsor provides timely notice to the University that a delay is desired, the submission of the manuscript to a publisher or other public disclosure shall be withheld for the period requested, but in no event shall the total period of delay be longer than one (1) year following the date of the notice of intent to submit for publication. -Such a period will permit the sponsor to have the necessary patent applications prepared and filed, and does not unduly restrict the dissemination of scientific knowledge. Exceptions to this section may be authorized by the Vice President for Economic Development.

# IV.VIII. AVOIDANCE OF CONFLICTS

Conflicts involving patentable inventions and discoveries<u>Intellectual Property ownership</u> may arise when University employees or students enter into personal consulting agreements with outside firms and organizations. -The agreements which business firms generally wish to have executed by those who are to serve in a consulting capacity frequently contain provisions requiring the licensing or assignment of the consultant's inventions and patents<u>Intellectual Property</u> to that business firm.- Such provisions may apply to areas in which the individual's University work lies, and thus may come into conflict with the terms and conditions of this policy.

Prior to signing any consulting agreement which deals with patent rights, trade secrets, or the like, if any University time, facilities, materials or other resources are to be involved in the carrying out of such consulting work, University employees or students must submit the proposed agreement to the <u>Wyoming Technology Transfer and</u> Research <u>Advisory CommitteeProducts Center</u> and obtain a waiver of University rights, or otherwise modify the agreement to conform with these policies.

# **V.IX.** DUTY TO DISCLOSE DISCOVERIES AND INVENTIONS INTELLECTUAL PROPERTY

All individuals whose discoveries and inventionsIntellectual Property are covered by these

policies have a duty to promptly disclose the same to the Research Advisory Committee through the Vice President for Research and Economic Development.—<u>through the Wyoming Technology Transfer and Research Products Center.</u>

The duty of disclosure arises as soon as the individual has reason to believe, based on his or her own knowledge or upon information supplied by others, that the discovery or invention may be patentable. Certainty about patentability is not required before a disclosure is made. Intellectual Property may be subject to this Policy. Certainty about patentability or copyright ability is not required before a disclosure is made. Prior to any verbal or other disclosure of Intellectual Property, whether formal or informal, to a non-University third party, individuals must disclose the Intellectual Property to the Wyoming Technology Transfer and Research Products Center. Examples of disclosures to non-University third parties include, but are not limited to, potential non-University collaborators, conference presentations, poster sessions, journal publications, conference roundtable discussions, and discussions with potential third party sponsoring entities for support of continued work on the Intellectual Property.

Individuals shall execute such declarations, assignments, or other documents as may be necessary in the course of patent evaluation, registration, administration, or enforcement in order to ensure that title in such inventions shall be held by the University, or by such other parties as may be appropriate under the circumstances. <u>Employees and students who do not promptly disclose shall be subject to disciplinary action.</u>

#### VI.X. WYOMING TECHNOLOGY TRANSFER AND RESEARCH ADVISORY COMMITTEEPRODUCTS CENTER

The <u>Wyoming Technology Transfer and</u> Research <u>Advisory CommitteeProducts Center</u> shall review and recommend to the Vice President for Research and Economic Development or the Vice President's designee the procedures for the implementation of these policies; shall resolve questions of <u>inventionIntellectual Property</u> ownership that may arise between the University and its faculty, staff, or students; shall recommend to the Vice President for Research and Economic Development the expenditure of the University research and development fundfunds from patent and/or licenses; and shall make such recommendations as are deemed appropriate to encourage disclosure and to assure prompt and expeditious handling, evaluation, and prosecution of patent opportunities.

# **VII.XI.** PATENT MANAGEMENT

#### The President, or the President's designee

The Wyoming Technology Transfer and Research Products Center, in consultation with the Office of General Counsel, is authorized to negotiate with reputable agencies or firms to secure arrangements for patent management, including competent evaluation of invention disclosures, expeditious filing of applications on patents, and licensing and administration

of patents.

#### V. COPYRIGHT OWNERSHIP

Except as provided in Sections IV, XV and XVI of this Regulation, all rights to copyrightable material shall be the property of the creator. The University may execute a written agreement waiving its rights, if any, in and to such material. The distribution of royalties, if any, is a matter of arrangement between the creator and his or her publishers or licensees.

#### VI. COMPUTER SOFTWARE

All copyrights in and to computer software, including but not limited to programs, operating systems, procedures, and associated manuals, which result from research activities carried out at the University, and which are developed with the aid of or for use with University hardware shall be the sole property of the University of Wyoming. The terms and conditions of Sections I through XII of this Regulation, including but not limited to Section VII which describes the distribution of income, shall apply to computer software of the type described herein. Section VII does not apply to works for hire.

#### **VII. VIDEOTAPED PRODUCTIONS**

All copyrights in and to videotaped courses of instruction or other audio-visual productions which result from research or other activities carried out at the University, and which are produced with the aid of the University's facilities or staff or with funds administered by the University, shall be the sole property of the University. Any individual contemplating the development and production of a videotaped course of instruction or other audio-visual production must secure the prior approval of the Vice President for Academic Affairs, or designee. All of the foregoing terms and conditions of this Regulation, with the exception of Section VII, shall apply to videotaped courses of instruction of the type described herein. The means of remuneration, and the distribution of income earned from the development of such a course or production, shall be agreed upon in writing prior to the development or production of same. Remuneration and distribution of income do not apply to works for hire.

#### VIII. SERVICE MARK, TRADE-MARK AND TRADE-NAME OWNERSHIP

Service marks, trade marks and trade names with respect to products resulting from or arising out of research or other activities carried out at the University or developed with the aid of its resources, facilities or staff, shall be the property of the University. Without express authorization from the President or the President's designee, no steps shall be taken to secure such trade marks, trade names or service marks by usage or registration. The University reserves the right to register such marks as it deems appropriate, and to license the use of such marks, provided that the income from such licensing shall be used to support the research and educational programs of the University as defined herein.

#### **VIII. EXCEPTIONS**

University Intellectual Property

Exceptions to any of the above policies may be authorized by the President or the President's designee following a favorable review and recommendation from the Research Advisory Committee. Before recommending such an exception, the Committee should determine that, President's designee if on the basis of the evidence available, such exception is consistent with the University's responsibilities to the public interest.

#### Responsible Division/Unit: Office of Research and Economic Development

Source: None

Links: http://www.uwyo.edu/regs-policies

#### Associated Regulations, Policies, and Forms: None

#### **History:**

University 641, Revision 3; adopted 7/17/2008 Board of Trustees meeting Revisions adopted 5/10/2013 Board of Trustees meeting Revisions adopted 9/12/2014 Board of Trustees meeting Reformatted 7/1/2018: previously UW Regulation 3-641, now UW Regulation 9-1

#### AGENDA ITEM TITLE: <u>Approval of modifications to UW Regulation 2-200 (Student</u> <u>Classification for In-State and Non-Resident Tuition)</u>, Brown/Evans

#### SESSION TYPE:

- Work SessionEducation Session
- □ Information Item
- $\boxtimes$  Other:

[Committee of the Whole – Items for Approval]

#### APPLIES TO STRATEGIC PLAN:

- $\boxtimes$  Yes (select below):
  - □ Driving Excellence
  - □ Inspiring Students
  - □ Impacting Communities
  - High-Performing University
- □ No [Regular Business]

Attachments are provided with the narrative.

# EXECUTIVE SUMMARY:

At the December 2020 UW Board of Trustees meeting, the Board approved modifications to UW Regulation 2-200 (Student Classification for In-State and Non-Resident Tuition) to streamline the process by deleting a complicated calculation of financial independence and add veterans language required by a change in law effective July 1, 2020.

Attached are proposed additional modifications to allow for more flexibility in meeting "domicile" and to address extenuating circumstances.

Per the routing process for UW Regulations, the proposed modifications were provided to the President's Cabinet, Deans and Directors, Faculty Senate, Staff Senate, ASUW, and the Internal Auditor. Several units provided feedback, which were incorporated in the attached version.

The Trustees Regulation Committee will discuss this item at the October 2021 Board of Trustees conference call and recommend full Board action, if appropriate.

PRIOR RELATED BOARD DISCUSSIONS/ACTIONS: None.

WHY THIS ITEM IS BEFORE THE BOARD: UW Regulation 1-101 requires that the Board approve modifications to UW Regulations.

ACTION REQUIRED AT THIS BOARD MEETING:

Board approval, modification, or disapproval of the recommended modifications to the Regulations.

PROPOSED MOTION: "I move to authorize modifications to UW Regulation 2-200, as presented to the Board"

PRESIDENT'S RECOMMENDATION: The President recommends approval.

Updated 7-19-21 Incorporated campus feedback 9-24-21 (highlighted in yellow) Incorporated additional Regulation Committee feedback 10-1-21



# UNIVERSITY OF WYOMING REGULATIONS

**Subject:** Student Classification for In-State and Non-Resident Tuition **Number:** UW Regulation 2-200

#### I. PURPOSE

To provide policies and procedures for determining whether a student qualifies for instate or non-resident tuition.

# II. **DEFINITIONS**

**Domicile:** For purposes of this Regulation, domicile is defined as a A person's fixed, permanent, and principal home for legal purposes for a period of at least twelve (12) consecutive months preceding the term of enrollment. It is the place where they intend to remain and to which they expect to return. A person can have more than one residence, but only one domicile. Domicile has two components – residence and the intent to remain. When these two occur, there is domicile.

Eligibility for <u>D</u>domicile <u>also</u> requires <u>documentation of the person's continual</u> <u>residence</u> <u>physical presence</u> in the State of Wyoming and a combination of 5 of the 8 criteria listed all of the following <u>below</u> to be completed at least twelve (12) consecutive months before making an appeal for residency tuition <u>unless the Residency Classification Committee</u> grants exemptions for the meeting of these requirements pursuant to Section (V) of this <u>Regulation</u>:

- **A.** Wyoming vehicle registration;
- **B.** A valid Wyoming driver's license or <u>government issued photo</u> <u>Identification Card</u>; and
- C. Gainful Employment:-
- **D.** A Wyoming voter registration;
- **E.** A Wyoming address on the most recent federal income tax return;
- **F.** Documented use of a local Wyoming bank;

#### Student Classification

#### Updated 7-19-21 Incorporated campus feedback 9-24-21 (highlighted in yellow) Incorporated additional Regulation Committee feedback 10-1-21

- **G.** Change in permanent address on all pertinent records pertinent to Wyoming;
- **H.** Proof that the individual receives public assistance from the State of Wyoming or from a city, county or municipal agency in the State of Wyoming.

In addition, a student must have a Wyoming address on their most recent federal income tax return and a Wyoming voter registration.

**Gainful Employment:** Documented employment or self-employment within the state of Wyoming of at least twenty (20) hours per week continuously for a period of at least twelve (12) months or the equivalent number of work hours over the same period. Employment and monies derived dependent upon a status as a student does not qualify for consideration as gainful employment.

# III. STUDENT CLASSIFICATION FOR TUITION AND FEE PURPOSES

Individuals who qualify as Wyoming Residents shall pay the in-state tuition rate, as established by the Board of Trustees. All other students will be classified as non-resident for tuition purposes and shall pay the out-of-state tuition rate, as established by the Board of Trustees. For the purposes of determining qualification for in-state or non-resident tuition, the following apply:

- **A.** Students residing in Wyoming primarily as a student are not eligible for resident status for tuition purposes.
- **B.** Students who can provide sufficient documentation of the following, will be considered a resident for tuition purposes:
  - **1.** Any person whose Domicile is in Wyoming.
  - 2. Graduates of a Wyoming high school.
  - **3.** Active Wyoming National Guard members and U.S. Armed Forces members stationed in Wyoming, and their dependents.
  - **4.** Graduate students for the duration of a University-funded or externally sponsored fellowship <u>or graduate assistantship</u>.
  - **5.** Wyoming residents temporarily absent from the State due to military service, attendance at an educational institution, or other type of documented temporary absence.

Student Classification

Updated 7-19-21 Incorporated campus feedback 9-24-21 (highlighted in yellow) Incorporated additional Regulation Committee feedback 10-1-21

- **6.** Individuals who have received an associate's degree from a Wyoming Community College, have been awarded resident tuition status by the Community College, and who subsequently attend the University within one year of leaving the Wyoming Community College.
- 7. A financial dependent who is under the age of 24 and under the care, custody, and support of a parent or legal guardian who is under the age of 24 or the spouse of an individual who is determined to be a Wyoming resident pursuant to this Regulation.
- **7.8.** A financial dependent who is the spouse of an individual who is a Wyoming resident pursuant to this Regulation.
- **8.9.** An applicant for resident tuition who is a veteran, eligible individual, or covered individual as described in 38 U.S.C. 3679(c)(2), shall qualify as a resident for purposes of tuition at the University of Wyoming if the applicant provides:
  - **a.** A certificate or other evidence of the veteran's or uniformed service member's qualifying service in the uniformed services of the United States;
  - **b.** Documented evidence before or at the time of enrollment at the University of Wyoming that:

The applicant for resident tuition intends to live in Wyoming during the term of enrollment;

The veteran was discharged or released from a qualifying period of service in the active military, naval or air service before the date of enrollment or the uniformed service member is currently on active duty;

The applicant is a veteran, eligible individual or covered individual as described in 38 U.S.C. 3679(c)(2).

**c.** A person who has qualified for resident tuition pursuant to the above requirements of this section, shall remain qualified in subsequent years if the person pursues one (1) or more courses of education while remaining continuously enrolled other than during regularly scheduled breaks, lives in the state during the term of enrollment; and, if the person is eligible through a transfer of eligibility pursuant to 38 U.S.C. 3319, the transfer has not been validly revoked. A spouse or child of a veteran, eligible individual, or covered individual as described in 38 U.S.C.

#### Student Classification

Updated 7-19-21 Incorporated campus feedback 9-24-21 (highlighted in yellow) Incorporated additional Regulation Committee feedback 10-1-21

3679(c)(2) who is eligible for resident tuition under paragraph 8 at the time of admittance to the University of Wyoming shall not lose eligibility for resident tuition before the time of enrollment at the University because the veteran, eligible individual, or covered individual as described in 38 U.S.C. 3679(c)(2) is transferred on military orders outside of this state.

**C.** Individuals who are not U.S. citizens or permanent residents are considered non-residents except as provided by Section B2 above.

#### IV. PETITIONING AND APPEALING TUITION DETERMINATIONS

A student may petitions for classification as a resident by submitting to the University Registrar or designee all accompanying documentation on or before the first day of classes for the semester the student wants the tuition classification to be reconsidered.

A student may appeal the Registrar's decision to the Residency Classification Committee, within ten (10) calendar days of the date of the Registrar's or designee's decision. The members of the Residency Classification Committee shall be appointed by the President or designee.

The Residency Classification Committee will review the written decision of the Registrar along with the student's original application and accompanying documentation which were submitted to the Registrar prior to the submission deadline for that semester and make a written finding to affirm or reverse the classification decision of the Registrar. The student has the burden of proof to show that the Registrar committed error in making the original decision regarding classification. The decision of the Residency Classification Committee is final.

Individuals may be reclassified when facts indicate that a change in residency has occurred since the time of original residence classification or since their most recent appeal. Such reclassification will remain in effect so long as the individual is continuously enrolled at the University. Reclassification as an in-state student will not be applied retroactively to previous terms.

## V. <u>EXTENUATING CIRCUMSTANCES</u>

In special cases where nonresident students can demonstrate that they have experienced extenuating circumstances which have prevented them from meeting the requirements for residency listed above, the student may submit information representing their situation to the Residency Classification Committee. In these instances the student will not be limited to the written review in section IV and may request a meeting be held in person or virtually. Students requesting this type of exception must: (1) provide substantial evidence of the Student Classification Page 4 of 5

#### Updated 7-19-21 Incorporated campus feedback 9-24-21 (highlighted in yellow) Incorporated additional Regulation Committee feedback 10-1-21

extenuating circumstances; and (2) provide sufficient evidence to the Residency Classification Committee of a non-academic reason for being in-state and of established residency for a minimum period of 12 months prior to the semester for which resident tuition is requested. The ruling of the Residency Classification Committee is final and no other opportunity for appeal will be granted. If a student wishes to request an exception to this Regulation based on a disability the student should work through University Disability Support Services to make the request.

**Responsible Division/Unit:** Office of the Provost and Vice President for Academic Affairs

**Source:** Wyoming Statute § 21-17-105; 38 U.S.C. § 3679(c)(2); 38 U.S.C. § 3311(b)(9); 38 U.S.C. § 3319

Links: <u>http://www.uwyo.edu/regs-policies</u>

#### Associated Regulations, Policies, and Forms: University of Wyoming Fee Book

#### **History:**

Trustee Regulation VIII; UW Regulation 8-1 adopted 7/17/2008 Board of Trustees meeting Revisions adopted 11/18/2010 Board of Trustees meeting Revisions adopted 11/12/2014 Board of Trustees meeting Revisions adopted 1/15/2015 Board of Trustees meeting Revisions adopted 4/13/2015 Board of Trustees meeting Revisions adopted 11/20/2015 Board of Trustees meeting Revisions adopted 7/13/2016 Board of Trustees meeting Revisions adopted 3/23/2017 Board of Trustees meeting Reformatted 7/1/2018: previously UW Regulation 8-1, now UW Regulation 2-200 Revisions adopted 7/12/2018 Board of Trustees meeting Revisions adopted 12/9/2020 Board of Trustees meeting

## AGENDA ITEM TITLE: COVID-19 Update, Seidel

#### SESSION TYPE:

- □ Work Session
- □ Education Session
- ⊠ Information Item
- □ Other:

[Committee of the Whole – Items for Approval]

#### APPLIES TO STRATEGIC PLAN:

- $\Box$  Yes (select below):
  - □ Driving Excellence
  - □ Inspiring Students
  - □ Impacting Communities
  - □ High-Performing University

# ☑ No [Regular Business]

□ Attachments are provided with the narrative—refer to Supplemental Materials Report.

#### EXECUTIVE SUMMARY:

President Seidel will provide a brief update on UW's efforts to help mitigate the spread of COVID-19.

#### PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

At its May 2020 meeting, the Board authorized a preliminary plan to open the university campus for the Fall 2020 semester. At its July 2020 meeting, the Board moved to authorize modification to the university's plan to restart campus, to require face coverings, and allow administration to make further modifications to campus plans related to COVID-19 without Board approval. At its March 2021 meeting, the Board passed a resolution directing the university president authority to reopen the university campus consistent with heath policy guidelines and directives of the state and federal governments with regard to COVID-19. At its May 2021 meeting, the Board moved to not mandate COVID-19 vaccines, to follow CDC guidance with regard to social distancing and facial coverings, and sunset the university's mandatory surveillance program as of June 30, 2021. At its August 2021 meeting, the Board moved to approve the Fall 2021 COVID-19 Campus Plan to include a temporary mask mandate, and President Seidel's additions of a mandatory education program for employees and students, one-time COVID-19 testing of all students and employees prior to the start of the semester, a stronger public information campaign, and the formation of a COVID-19 Advisory Committee led by College of Health Science Dean David Jones. At its September 2021 meeting, the Board authorized the continuation of the current mask policy to be revisited at each subsequent Board meeting.

#### WHY THIS ITEM IS BEFORE THE BOARD:

Continued updates on UW's response to the COVID-19 pandemic.

#### ACTION REQUIRED AT THIS BOARD MEETING:

Board review of the University's current face covering policy.

#### **PROPOSED MOTION:**

- "I move to continue the current mask policy as is stated on page 8 of the updated Fall COVID 19 Plan"; or
- "I move to modify the current mask policy to recommend but not require face coverings while indoors on university owned property, or when conducting university business or activities, including instruction and research, consist with CDC guidance."

#### PRESIDENT'S RECOMMENDATION:

The President recommends the university continue to follow the current mask policy.

## AGENDA ITEM TITLE: Wyoming Innovation Partnership Update, Seidel, Farkas

### SESSION TYPE:

- □ Work Session
- □ Education Session
- $\boxtimes$  Information Item
- □ Other:

[Committee of the Whole – Items for Approval]

## APPLIES TO STRATEGIC PLAN:

- $\Box$  Yes (select below):
  - □ Driving Excellence
  - □ Inspiring Students
  - □ Impacting Communities
  - □ High-Performing University
- ⊠ No [Regular Business]

Attachments are provided with the narrative.

## EXECUTIVE SUMMARY:

President Seidel and Steve Farkas will provide a brief overview of the Wyoming Innovation Partnership including the internal organizational and budget structure UW will implement.

## PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

At its September 2021 meeting, the Board asked for clarification and an overview related to the Wyoming Innovation Partnership.

WHY THIS ITEM IS BEFORE THE BOARD: Requested by the Board.

ACTION REQUIRED AT THIS BOARD MEETING: N/A

PROPOSED MOTION: N/A

PRESIDENT'S RECOMMENDATION: N/A

#### 9/22/2021

#### University of Wyoming Coordination and Procedures for Wyoming Innovation Partnership (WIP) 2021

## **Background**

Governor Gordon in partnership with UW and the state's Community Colleges has created the Wyoming Innovation Partnership (WIP). A collaboration that enables the state's higher education community to strengthen and grow Wyoming's economy through innovation, advanced workforce training, research, and education.

The collaboration will strive to diversify the state's economy through state-of-the art technologies and training practices by pairing Wyoming's institutions of Higher Education with businesses, governmental agencies, and community groups to stimulate economic activity and grow Wyoming's workforce.

WIP is committed to collaborative research and programmatic development that will support Wyoming's priority economic sectors, adding value to the state's core industries such as natural resources, tourism, outdoor recreation, and agriculture, while also activating new economic sectors such as healthcare, digital technology, arts/culture, advanced manufacturing, and professional/scientific services.

The WIP is led by the Presidents Steering Group (PSG), a group comprised of presidents from each of the state's academic institutions. The PSG is supported by committees charged with initiating efforts that translate to strengthening the state's workforce, promoting new business creation, and identifying additional opportunities for diversifying the state's economy and revenue streams. The WIP will strive to engage with business partners to identify training and educational needs throughout the state and create relevant programs that address these needs.

#### 9/22/2021

# WIP Coordination at University of Wyoming

#### I. Organizational Structure

Administrative support and related operations will be performed by the University of Wyoming in coordination with WIP member institutions.

- WIP Co-Chairs (3) co-chairs shall work together in coordinating and executing all responsibilities of WIP:
  - 1. President of the University of Wyoming (UW President Ed Seidel);
  - 2. Current President of the Community College President's (Casper College President Darren Devine); and
  - 3. Governor appointment (Lachelle Brant)
- WIP Executive Director leads day to day operations of the WIP. The Executive Director is appointed by the WIP Executive Committee.
  - Steve Farkas, UW AVP for Economic Development and Innovation
- WIP Administrative Support project management, analysis, finance/accounting, communications, general admin support
  - Administrative costs will be funded through WIP-ARP proposals
  - Positions may reside at both UW and Wyoming Community College Commission

#### II. Committees

### • Executive Committee

- The PSG shall have an Executive Committee whose role is to oversee the coordination of the PSG and ensure proper alignment to agreed-upon directions and specified outcomes.
- The Executive Committee will include the (3) Co-Chairs and WIP Executive Director

## • Standing Committees (Working Groups):

- Business Model and Funding will promote and support development of sustainable practices to allow programmatic development to proceed and operate effectively. In addition, the committee will formulate and manage a system for measuring WIP's economic impacts both locally and statewide.
- **Programmatic Development** will develop the appropriate educational pathways in response to state economic sector skills needed that can be shared across the WIP. The Committee will develop a comprehensive understanding of the current state of education and workforce development in Wyoming; identify pilot projects to create meaningful economic impact; cultivate partnerships with nonprofits and industry that currently offer programming targeting workforce development and training; identify grant projects that could underwrite statewide initiatives in education and workforce development.
- Advocacy and Communication assesses opportunities for higher education advocacy in support of research and innovation in Wyoming; develops advocacy plans to promote WIP as a successfully collaborative model; explore funding WIP funding, foundations, and the private sector. Establishment of a communication and marketing plan to inform stakeholders across the state.

#### 9/22/2021

#### III. Hubs

Focal areas of interest or "Hubs" will be formed between institutions and other partners to work collaboratively on programmatic activities supporting the WIP to:

- Drive innovation, workforce development, program development and economic growth throughout the state of Wyoming;
- Assess and meet regional needs through a combination of collaborative research, publicprivate partnerships, entrepreneurship and training programs;
- Collaborate with Hubs across the state and share best practices; and
- Advocate for the value of higher education at the state and national levels.

Hubs may be conceived and suggested by any of the state's higher education institutions, however they must be supported by another Wyoming community college or the University of Wyoming. Key considerations for support include:

- Demonstrated geographic need (no existing hubs of the same focal point in proximity);
- There is an existing relationship with a Wyoming community college or the University of Wyoming;
- Apparent evidence of public-public and/or public-private partnerships to support the new Hub; and
- Demonstrated willingness to collaborate with existing Hub, as well as commitment and alignment with Wyoming's economic development interests.

#### IV. Budget

A designated account in UW's Office of Research and Economic Development will be used for receiving all grants/funding related to UW's role in supporting WIP related activities and to ensure proper use, alignment and reporting. The Executive Director will coordinate WIP budget activities.

#### V. Meetings

General meetings of the WIP/PSG will be held monthly. Meetings may be held in person or via live electronic means (phone, zoom, skype, etc.). Additional meetings may be scheduled at the discretion of the PSG. Locations and timing will be determined by the PSG.

#### VI. UW Reporting

UW's President and WIP Executive Director will provide quarterly updates to the UW Board of Trustees Committees on Research and Economic Development and Academic and Student Affairs to include but not be limited to, new and developing initiatives, programs, collaborations, and budget considerations.

# Wyoming Innovation Partnership

03 September 2021

The Honorable Mark Gordon Governor of Wyoming State Capitol 200 West 24<sup>th</sup> Street Cheyenne, WY 82002

Dear Governor Gordon,

The Presidents' Steering Group (PSG) of the Wyoming Innovation Partnership is committed to a collaborative and holistic approach to leveraging Wyoming's Institutions of Higher Education (IHE) to drive economic development across the state. The attached Year 1 proposal outlines a joint funding request that builds on clear connections to the original WIP ARP Funding request with identified phase one components that can be implemented in the first year and that maximize economic impact across the state.

We greatly appreciate the opportunity to serve the great state of Wyoming.

Sincerely,

Steve Farkas Executive Director, WIP

# Wyoming Innovation Partnership

#### Prioritized Project List for Initial (Year 1) Implementation September 3, 2021

**Background:** The Presidents' Steering Group (PSG) has created a holistic approach to leveraging Wyoming's Institutions of Higher Education (IHE) to drive economic development across the state. This document focuses on the initial phases of this project, including only phase one components that can be implemented in the first year and that maximize economic impact across the state.

**Overview:** The WIP endeavors to create the functional environment through a collaborative approach that will give Wyomingites the skills, means, and tools to drive economic development across the state. This requires **Digital Infrastructure** to bring digital expertise and computing power to all corners of the state. It also requires widespread **Entrepreneurial Spirit** where the skills and ambition are cultivated and developed to empower citizens to create engines that drive economic advancement. It also requires a **Consortial Infrastructure** that allows the nine IHE's to share expertise and increase the educational capabilities needed to advance the statewide economic workforce needs. With these infrastructure improvements, Wyoming can more effectively capitalize on its unique location and resources to ensure that the benefits of our natural resources (energy, agricultural and touristic) stay in the state.

**Process:** To better understand the rationale behind the proposals listed below, it is important to note the process and criteria utilized. The proposals below are the result of the PSG collaboratively applying the criteria of speed to market and maximal economic impact to prepare for a proposal of first round WIP - ARP funding. Note: The proposals below are not necessarily the top priorities for any given institution and not representative of individual requests associated with an individual institution, but rather are key considerations in support of the state's economic priorities. It is expected that additional funding tranches will be made available for WIP projects, consistent with those represented in the original 3-year ARP proposal. Additionally, the WIP – ARP proposal in general has prioritized flexibility in the face of an uncertain funding environment.

#### **Notes on Projects:**

- Costs are based on informed estimates. Up-front, one-time costs have been prioritized, but some administrative or faculty lines have been included where necessary to create or expand a high-priority program.
- The location of programs is not finalized and subject to discussion and change. Lead institution and locations will be based on the expertise of the PSG and consider current employment needs, established infrastructure and facilities, faculty expertise, and speed to implementation.
- The January deliverables are estimates based on established norms for contracting, purchasing, curriculum development, curriculum approval processes, and funding availability. Ongoing costs for new faculty or administrative lines will, of course, be ongoing cost centers.
- Total amount included in requests: \$24,170,000

# **Consortial Infrastructure**

**Overview:** Immediate and long-term success relies on establishing the administrative tools to implement, manage, and continuously improve collaborations across the eight IHE's, as well as establishing the delivery tools to ensure that educational offerings are available across the state without unnecessary and expensive duplication.

Component Description	Cost	January 2022 Deliverables
<b>Component 1: Administrative Support -</b> Ongoing coordination of the collaborative and consortial approaches is necessary to scale up impact more quickly, but also increases administrative load. Additional administrative support staff at a state-wide level can reduce any negative workload impacts the WIP has on the eight institutions. Additional support for Project management, analysis, Finance/Accounting and Admin Support	<b>\$820,000,</b> inclusive of benefits for five full-time staff	5 FTE hired and providing administrative support for WIP and WIP subcommittees.
<b>Component 2: Course-sharing Platform</b> – Several third-party organizations have developed established, effective platforms to allow multiple institutions to share courses, allowing IHE's to increase the number of programs offered without the normally required increase in staff and/or facilities/equipment.	<b>\$400,000,</b> inclusive of five years of platform maintenance.	Functional course-sharing platform with a sizeable course catalog sufficient to expand program offerings across institutions.
<b>Component 3: Virtual-reality</b> expansion – Many technical training programs utilize hands- on training with expensive equipment and facilities. The state's IHE's and K12 recently began using third-party VR companies to develop online versions of these courses – this funding allows that to be scaled up to increase the geographic availability of previously site- limited training programs.	<b>\$2.5M</b> Includes hardware, software, and training to allow for all 8 institutions to offer substantial VR versions of technical programs. Ongoing subscription costs are substantially lower.	Initial installation and implementation of VR functionality across the eight institutions.
Total	\$3,720,000	

# Energy

**Overview:** Wyoming's location provides both abundant energy sources (coal, oil, gas, solar, wind) as well as a key role in America's energy transmission infrastructure. We must ensure Wyomingites have the cutting-edge skills sets necessary to both fill the workforce needs and drive innovation that maximizes the economic impact of our state's unique resources.

Component Description	Cost	January 2022 Deliverables
<b>Component 1: Powerline Technology program</b> – Wyoming does not currently offer a powerline technology program and training within the state, yet increased electricity transmission capability is needed for the scale-up of renewables and other low-carbon energy production. The key limiter on this program is upfront costs – once established the cost of instructors will be covered by program tuitions. Currently these roles are trained out-of- state, and are frequently filled by temporary workers who leave Wyoming when individual projects conclude.	<b>\$2M/college</b> – For purposes of Year 1, only one college will participate.	<b>2 years.</b> At this time students could begin matriculating. The need for new facilities is the biggest factor extending this timeframe.
<b>Component 2: Low-voltage Fiber Optic Program</b> – Just as the national energy grid crosses Wyoming, so does the nation's information infrastructure. This program can be affiliated with Powerline Technology program due to related equipment and expertise needs. Also provides opportunities for displaced energy sector workers.	<b>\$500k</b> – Covers curriculum dev and equipment necessary for two programs	<b>One year</b> . Curriculum development is the limiting factor, given the program approval timeline.
Total	\$2,500,000	

# Entrepreneurship

**Overview:** An entrepreneurial spirit and skill set are necessary to unlock the job-creating potential of Wyoming's citizens. This requires the development of state-wide training capabilities, incubator spaces for start-ups, and wide-spread access to expertise, mentorship, and banking/finance tools.

Component Description	Cost	January 2022 Deliverables
<b>Component 1 - Center for</b> <b>Entrepreneurship and Innovation</b> - Development of the CEI will deliver necessary infrastructure and support for statewide expansion of entrepreneurship, to include the Cheyenne Center for Entrepreneurship and Education (C2E2) and expansion of IMPACT 307 to offer augmented curricula and expand physical locations, including but not limited to Evanston/Uinta, CWC and LCCC.	<b>\$2M</b> in ongoing and one-time costs.	<ul> <li>Supplemental funding for faculty to create pathways and articulations between UW and the CC's to support statewide entrepreneurial education. Hire additional labor resources to begin development of "bootcamp" activities across the state.</li> <li>Creation of the C2E2 Board of Advisors and Initial Cataloging/Inventory of local resources, efforts, activities, etc. Foundational documents for the network and its operations may also be completed.</li> </ul>
<b>Component 2 - Innovation</b> <b>workshops, student projects,</b> <b>business/corporate engagement</b> Coordinated activities that allow for sharing of best practices and enable state-wide network connections. Destinations for UW and CC collaboration supporting local, regional and state-wide innovation activities that connect our industry partners to faculty and students to tackle strategic challenges in innovative and applied ways.	<b>\$2M</b> in ongoing and one-time costs	<ul> <li>Expand IMPACT 307 assets in addition to similar resources at community colleges to deliver workshops, projects, etc.</li> <li>Business engagement</li> <li>Faculty workshop design</li> <li>Faculty project advisement</li> <li>Project Delivery + Student Experience Coordinators</li> <li>Event Production Calendar</li> <li>Marketing / Communications</li> <li>Travel</li> </ul>
<b>Component 3 - Expansion of</b> <b>MakerSpace Availability</b> – includes creation of permanent maker space facilities across the regions, and expansion of mobile maker spaces to allow for multiple, simultaneous "residencies" outside of areas served by permanent sites.	\$1.5M	Initial design concept (Level II), cost estimates, and programming plan. Can include fabrication labs, food industry incubators, and other relevant manufacturing equipment.
Total	\$5,500,000	

# **Digital Infrastructure and Technology**

**Overview:** Economic development requires access to information, computing resources, and the skills and training necessary to create new industries and expand existing industries. Access to digital resources requires a significant improvement in existing digital infrastructure, and improving the digital skillsets of Wyoming's workforce requires an expansion of training and educational resources in regards to both content and accessibility. Economic advancement across all sectors (Energy, Technology, Agriculture, Tourism, Education, Health Care, Advanced Manufacturing, Workforce etc.) will be reliant upon increased computing capabilities, with a centralized nucleus of hyperaccute data processing power will be critical for Wyoming to support expansion and advancement of current industries as well as provide the stability of digital infrastructure in support of growth among new and existing industries in Wyoming and out.

Component Description	Cost	January 2022 Deliverables
<b>Component 1: Software Development</b> <b>degree(s)</b> – Wyoming does not currently have a Software Development/Engineering degree which is a growing an immediate need across business and industry sectors of the state. This degree is being crafted amongst the 8 IHEs in the state and alongside Wyoming based businesses to create an online program that can produce workforce ready software development graduates who can respond immediately to the industry needs of Wyoming businesses.	\$600k - 3 faculty, 1 support staff; infrastructure improvements and equipment for Software Development degrees *Ongoing funding will be needed in years 2-3 with corresponding increases assoc. w/ any added faculty expansion across WY.	Launch hiring process
<b>Component 2: School of Computing-</b> will serve as an engine to build out training and education programs for college students in big data, artificial intelligence (AI), and their applications. A corporate partners program will develop close research connections to Wyoming industries and work with the university's new Center for Entrepreneurship and Innovation to build a talent pipeline from K-12 to the workforce. The SoC, by design, creates the foundation and infrastructure of support for programmatic expansion across all 8 IHE's through increased data computing and capabilities within the state. Creating opportunities for increased computational power in support of economic growth.	\$1,150,000 total. Training and curriculum development (\$750,000), Research Scientists (\$250,000), Graduate Assistants (\$100,000), Visiting Scholars (\$50,000)	Hire initial staff for WIP project management and training/outreach for K-12 and CCs, prepare initial training material, deliver initial training courses, develop undergraduate curricula for new majors/minors, develop 2+2 agreements across state, host visiting scholars, hire initial research staff and graduate students

		Page 50
Component 3: Wyoming Data Hub-The	\$4M total. \$175,000 staff	Procurement of new
Hub will support technology-based	costs to initiate and	instrumentation, hiring of initial
approaches to specific important areas	coordinate planning for the	staff, report detailing build out
including biodiversity, agriculture, energy,	datahub, \$3.325M for new	and management of the new
health sciences and advanced	instrumentation, \$500K for	datahub including its integration
manufacturing. These investments will	staff/student costs for	with WIP.
foster an open culture for data sharing and	operation and dataset	
data innovation among its inaugural faculty	generation, analytics etc. for	
and student programs and with Wyoming	datahub, including new	
Community Colleges, state agencies,	AI/ML support.	
industries and national partners.		
Component 4: FinTech and BlockChain-	3  FTEs = \$450,000	Implement process for current
Develop educational programs to be shared		blockchain/FinTech courses
between the Community Colleges and		available for online, statewide
University in support of expansion of		consumption
existing minors and develop certificates		
across the FinTech and BlockChain areas		
Total	\$6,200,000	

# **Tourism and Hospitality**

**Overview:** Just as Wyoming's central location in the US has allowed us to develop important transportation industries, our natural beauty and unique outdoor recreation venues can be better leveraged to extract added revenue from domestic and international tourism. This requires improvements in access to diverse trainings, coordination and collaboration across the tourism industry, and investment in tourism infrastructure to extend the average duration and spending amounts amongst out-of-state travelers.

Component Description	Cost	January 2022 Deliverables
<b>Component 1: Establishing training</b> <b>programs to address growth areas</b> <b>currently not served.</b> Hospitality, ORTM and EMT Search and Rescue Programs, Bicycle Instructor Cert. Programs, Aerial Advent. Operations, Mech. Trail Const. Certl, Outdoor Rec programs.	\$3.5M	<ul> <li>Stakeholder Engagement</li> <li>Program Dev</li> <li>Program start-up</li> <li>Search Costs</li> <li>Market Research</li> <li>Research support</li> <li>Data sets/access</li> </ul>
<b>Component 2: Culinary &amp;</b> <b>Hotel/Restaurant Management</b> – Expansion of program in Teton County, which is drastically underserved, and expansion and marketing of programs in Casper, Cheyenne and elsewhere.	\$750K	<ul> <li>Hire Chef</li> <li>Temporary Kitchen Rental</li> <li>Program start-up</li> <li>Kitchen design and construction</li> <li>Statewide Culinary Expansion efforts</li> </ul>
<b>Component 3: Wyoming Outdoor</b> <b>Recreation, Tourism and Hospitality</b> <b>Center (WORTH Center)</b> A central hub to provide professional development, extension and outreach, and applied research to support these industries across the state.	\$2M	<ul> <li>Director</li> <li>Program Developer</li> <li>Office Asst</li> <li>Existing Faculty Comp</li> <li>Visiting Faculty Comp</li> <li>CBEA Research Hire</li> <li>Graduate Research Students</li> </ul>
Total	\$6,250,000	

#### Wyoming Innovation Network (WIN) Response to the American Rescue Plan (ARP) Submitted to Governor Mark Gordon's Office 5-13-21

Provided proposals support modernizing and refocusing Wyoming's higher education system to increase collaboration between the University of Wyoming and the state's community colleges with emphasis on developing innovative solutions that support and enhance Wyoming's economy and workforce.

Requested investments will assist with development of strategic programming in key areas focused on Wyoming's needs. Emphasis will be placed on workforce development in high-potential areas; supporting and training entrepreneurs and new business startups; a research and market analysis agenda aimed at technology transfer and commercialization; and developing outside revenue sources such as corporate partnerships to provide new opportunities for students.

WIN is intended to support the state's overall economic vision set forth by the Wyoming Business Council and support education attainment goals developed by the state, allowing the state to better focus its resources to assist both existing industries, and areas identified as having significant growth potential.

Pursuant to recent WIN leadership retreat, ARP funding priorities are grouped into the following areas: Programs, Infrastructure, and Partners. Emphasis is placed on workforce development and retention, economic resilience, and supporting the state's economic development strategy.

Recognizing proposed Center for Entrepreneurship and Innovation and School of Computing models are designed to support WIN partners and the state's economic/workforce development agenda, they have been included.

Total WIN Request: \$126M

## INFRASTRUCTURE

#### **Define the Problem:**

The State of Wyoming has an underdeveloped infrastructure that limits access to education and workforce/industry needs. Limitations of existing broadband coverage, lack of fiber-optics, minimal incubation space and digital educational opportunities have created barriers that prevent the state from achieving desired objectives.

#### How do you know this is a problem?

The WIN, led by the Presidents Steering Group, held a retreat on May 3, 2021 to discuss the primary factors limiting advancement and response to education, workforce and industry in the state. Examples include:

- Low college going rates of adults, low postsecondary attainment rates, etc.
- Lower skilled populace, without postsecondary education that makes economic diversification, business recruitment/relocation a challenge
- Applicant pools numbers are declining, employee turnover is increasing, etc.
- Significant deferred maintenance logs that aren't being addressed, lost operating dollars as a result of stagnant and declining state revenues, etc.

# Cause:

The following infrastructural elements have been identified as key areas of need for successful response to state educational, workforce development, and economic objectives:

- Broadband connectivity and stability across the state, including delivery in rural and previously unsupplied regions
- Expand and develop existing extension offices, creating physical space for education, service, and innovation based activities.
- Leverage IMPACT 307 model state-wide (update/retrofit existing incubator spaces) and provide greater access to start-up initiatives connected to the primary economic sectors
- Strain from COVID-19, competition with local job opportunities, reduction in programs and services because of budget cuts (lost confidence by the consumer), affordability and lack of financial aid, competition with other providers, not enough of the right programs being offered, decreased funding for recruitment and marketing, etc.
- Marketing/messaging campaign is necessary to build awareness and availability of resources that impact educational and workforce opportunities. Marketing and messaging needs hinge on the ability to deliver information to historically inaccessible regions of the state
- High touch and high tech learning spaces across the state are needed to support instructional programs. Digital classrooms that allow for active and engaged learning and shared experiences within a shared resource model, create efficiencies and diminish the geographical challenges that impact Wyoming
- Student success practices that focus on first year students, adult learners, focused on retraining, and traditional transfers will be key to delivering a highly trained and credentialed workforce. New investments in Student Success Management systems (e.g. Navigate) will allow for real time and intrusive responses to insure student success and degree completions as well as tracking enrollment, application, and retention statistics
- Modifying existing learning spaces to accommodate experiential learning, special company projects, innovation exercises, etc.
- Address student transfer inefficiencies by developing broader pathways for 4 year degrees that support the state's priority economic sectors and allow for quicker on-ramping of students into educational areas with high employability upon credential completion.
- Building a Wyoming Workforce and Corporate "work base" creates opportunities for workers to stay in Wyoming while attracting companies with funding for educating their workforce to the state. This further encourages companies with apprenticeship and internship programs to look to Wyoming for talent as well as attracting talent from out of state with funds to cover tuition
- Lack of financial assistance to engage/re-engage Wyoming's adults in postsecondary education or training
- Fewer graduates to enter the workforce, declining tuition and fee revenue, inability to recruit new/relocating businesses to the area and state, etc.

# **Effects:**

Workforce, Industry and Educational needs are elevated and connected in a manner that allows flexibility for responding to the growth and changing needs of the state's priority economic sectors.

## **Key Metrics:**

Existing business growth/retention, business recruitment, workforce development and retention aligned with priority economic sectors, increased education attainment

## **Available Funding:**

None. Requesting \$30M investment for noted causal areas.

## PROGRAMS

## Center for Entrepreneurship and Innovation (CEI)

## **Define Opportunity:**

Wyoming's higher education entrepreneurship and innovation assets are not coordinated, efficient, nor fully aligned with the state's priority economic sectors and workforce development/retention needs. The CEI serves as the coordinating entity to facilitate entrepreneurship and innovation activities across UW and Wyoming's community colleges in collaboration with proposed UW School of Computing and in support of the Wyoming Innovation Network (WIN). The center is a state-wide interdisciplinary integrator for programs that have potential for supporting the state's priority economic sectors in addition to activating new business sectors and supporting state workforce objectives.

## How do you know this is an opportunity?

Active discussions with various stakeholder groups, to include current entrepreneurs, small business owners, investors, and educators, combined with findings in recent state economic diversification studies, have identified Wyoming as having an underdeveloped entrepreneurial ecosystem. The current system is not coordinated and inefficient, making it difficult to fully engage available resources that support new business creation in addition to assisting the state's existing business communities. Entrepreneurs employ more than 50% of the private workforce, and generate more than half of the nation's GDP.

## Cause:

Not having a centralized, coordinated, and efficiently delivered model that supports state-wide entrepreneurship and innovation.

## **Effects:**

Challenges attracting and retaining the creative, educated, and entrepreneurial populations that typically support these ecosystems.

# Key Metrics:

New business starts, existing business growth/retention, business recruitment, increased access to capital, new job creation

# **Available Funding:**

None. \$20M programmatic start-up investment

- Training in entrepreneurship for all students at UW and CCs
  - Courses, seminars, etc.
  - Bootcamps and other applied learning opportunities
  - Associate degrees, Bachelor's degrees, minors, concentrations, certificates, etc.
  - Faculty/staff support
  - Investment: \$5M
- Coordinated state-wide mentoring network
  - o Alumni, associations, special interest groups, businesses, etc.
  - Web based mentor connection platform
  - Staff support
  - Investment: \$1M
- State-wide business incubators, lab spaces, and innovation learning hubs
  - UW and CC facilities retrofit and upgrades
  - Technology updates/upgrades to connect WIN partners
  - Investment: \$10M
- Innovation workshops, student projects, business/corporate engagement
  - Faculty / staff support
  - Investment: \$2M
- Corporate Relations Office
  - Engagement staff and support resources
  - Investment: \$2M

#### Notes:

It is understood that American Rescue Plan (ARP) funds are time-limited and not a source of ongoing funding for programs; however in this instance, the ARP funds would be used as initial seed funding to jump start the program and accordingly when the ARP funding expired, the program would be transferred to other funding (i.e., self-generated revenue, philanthropic/private donor support, etc.).

## **School of Computing**

## **Define Opportunity:**

Wyoming has consistently sought to contribute to its future by investing in the education and training of its citizens through the University of Wyoming. Recent investments, including the Tier 1 Engineering Initiative, Science Initiative, and Trustee's Education Initiative, along with capital investments in facilities provide a firm basis that focuses on the importance of Science, Technology, Engineering and Mathematics (STEM).

However, investments in the Tier 1 Engineering Initiative, computational infrastructure, and data science are urgently needed in order to stimulate and grow Wyoming's economy through the creation of new talent and research in computing and data across Wyoming's higher education institutions, including new K-12 computer science initiatives to sustain and grow talent into the future.

## How do you know this is an opportunity?

In the past decade, computing has become an increasingly crucial tool for research, for our graduates, and for almost all sectors of the economy. The University of Wyoming has responded by hiring faculty who use computing in their discipline, establishing programs like the Data Science Center and the Advanced Research Computing Center (ARCC), and by developing a partnership with the University Cooperation for Atmospheric Research and its NSF-funded National Center for Atmospheric Research (NCAR) around the NCAR-Wyoming Supercomputer Center (NWSC). These have supported new modes of faculty research and increased awareness of computing across the campus.

## Cause:

Today, computing's impact is found in virtually every discipline, and simulation and modeling are more important than ever, but are joined by new data science technologies like artificial intelligence, machine learning and blockchain that are starting to transform every academic discipline, every industry, and every aspect of modern society. Access to world-class research, infrastructure and workforce training in computing and data is therefore critical for Wyoming business', its citizens, and for UW's students.

## **Effects:**

A focus around "Computing for All" will develop close relationships and new programs with Wyoming community colleges, K-12 schools, state agencies and other community stake holders and will position the University as a regional leader in computing and data with national impact and global reach.

Furthermore, investments in the Tier 1 Engineering Initiative, computational infrastructure, and data science will coalesce around the establishment of a School of Computing (SoC) at the University of Wyoming. The SoC will serve as an engine for the Wyoming Innovation Network (WIN) to build out training and education programs for UW and community college students in big data, artificial intelligence (AI), and their applications. A corporate partners program will develop close research connections to Wyoming industries and work with the university's new Center for Entrepreneurship and Innovation to build a talent pipeline from K-12 to the workforce.

Faculty, staff and students will have access to supported computing and data infrastructure in all disciplines to facilitate new research and education opportunities. Faculty will be more competitive for external research funding. More research involving data science and AI will be catalyzed. New activities to increase involvement with WIN and private sector partners will be possible.

# Key metrics:

Increased state-wide higher education enrollments in computer/data science courses. Increased state-wide higher education graduates with a computer/data science credential. Increased percentage of state's K-12 educators who have received professional development/training in teaching coding/computer science. Increased corporate partnerships with Wyoming businesses focused on data science solutions and economic development and growth. Increased external funding involving computing and data. Increased educational offering for students involving use of modern cyberinfrastructure. Increased use of national computing and data cyberinfrastructure.

# Funding:

\$25M Investment:

- \$10,000,000 is for one-time critical infrastructure needs for UW's Advanced Research Computing Center (ARCC). Urgent investment is needed to update ARCCs compute/access nodes, network switches, backup storage and power/cooling equipment. New investment is needed to increase the GPU footprint to enable AI/data science research and applications and provide clusters to support WIN initiatives such as the provision of statewide software engineering education and research projects with the private sector.
- \$5,000,000 is for the Wyoming Innovation Network (WIN) training program that will develop state-wide computer/data science boot camps, specialized coursework, and teacher/lecturer professional development.
- \$3,000,000 is for start-up funds for six new faculty (\$500,000 per faculty start-up fund) to establish research programs (e.g., equipment, graduate students, post-doctoral fellows, etc.) with \$300,000 of each start-up fund invested in shared computing infrastructure to support their research (e.g., GPUs, unmanned aircraft, sensors, etc.).
- \$2,000,000 is for salary and support for visiting faculty scholars to bring immediate expertise in critical areas of need to Wyoming.
- \$3,000,000 is for five research scientists/faculty to seed the Corporate Partners Program and establish large-scale research projects. Each of these research scientists/faculty will be expected to eventually bring in substantial external funding to cover their salary and/or research students (e.g., each scientist will be responsible for securing approximately \$2,000,000 per year in external funds).
- \$2,000,000 is for graduate research students who will provide core research workforce, develop technology transfer from faculty research, and contribute to education and training.

# Notes:

It is understood that American Rescue Plan (ARP) funds are time-limited and not a source of ongoing funding for programs; however in this instance, in addition to the significant one-time computational infrastructure expenditures, the ARP funds would be used as initial seed funding to jump start the program and accordingly when the ARP funding expired, the program would be transferred to other funding (i.e., self-generated revenue, philanthropic/private donor support, etc.).

# **Priority Sector Program Collaborations**

# **Define the Opportunity:**

The Wyoming Innovation Network (WIN) is poised to deliver needed collaborative and creative leadership in response to the economic and industry needs of the state. Led by the Presidents Steering Group, the WIN comprises the senior leadership from Wyoming's eight institutions of higher education, the Community College Commission, Governor's office and business and industry partners.

# How do you know the opportunity exists?

Four primary economic sectors have been identified as key areas for investment and programmatic development. Through WIN, teams have performed an initial assessment and identification of programmatic opportunities to respond to industry, workforce development and economic needs.

## Cause:

- Agriculture it is clearly recognized that underdeveloped strengths exist across the state between institutions that point to strong and immediate opportunities to respond to agricultural industry needs. Agribusiness, Animal and Plant Sciences, Range/Ranch Management (with energy and tourism crossover opportunities), Ag Communications, INBRE program with biomedical research (with health sciences crossover), and blockchain applications represent immediately available areas for response.
- Energy / Manufacturing multiple opportunities are available for scaling up existing programs, improving synergies across the eight institutions, and developing new programs that leverage existing expertise and capital resources. More than 50 energy related credentials are currently available across the eight institutions, with opportunity for accelerated pathway development between institutions. Emerging opportunities to respond to industry and economic needs of the state include: Power lineman, Hybrid Diesel Technology, low-voltage fiber optic implementation, wind and solar energy and storage, carbon storage, and advanced manufacturing.
- **Hospitality/Tourism** the state is well positioned to meet current and future workforce development needs related to the hospitality, tourism, and outdoor recreation sectors; specifically, further development of degree offerings, certificate programs, and just-in-time credentials to address critical needs in workforce recruitment and retention.
- Technology / Health-tech a collaborative effort is underway to develop a 2-year software engineering degree with clear pathways to a 4 year degree at UW in response to statewide and national demand for software developers across all industry sectors. All 8 of the state's higher education institutions, along with international and industry partners (Wyoming based businesses) have contributed to this initiative; an initiative that will catalyze additional program development in areas such as artificial intelligence, machine learning, and cyber security.

## **Effects:**

Education attainment aligned with the state's priority economic sectors. Increased workforce development and retention.

# **Key Metrics:**

Increased output of graduate (credential holders) and overall increase in qualified workforce.

# Funding:

\$49M investment:

• **Programmatic Support (\$3M):** To maximize opportunities in existing programs and support launch of new academic pathways, contracted support personnel dedicated to the marketing and promotion is critical. Marketing requirements (two, six week campaigns per primary economic sector, min). Contract support to provide articulation alignment support required to update/maintain/create academic pathways.

- Agriculture (\$10M): it is clearly recognized that underdeveloped strengths exist across the state between institutions that point to strong and immediate opportunities to respond to agricultural industry needs. Agribusiness, Animal and Plant Sciences, Range/Ranch Management (with energy and tourism crossover opportunities), Ag Communications, INBRE program with biomedical research (with health sciences crossover), and blockchain applications represent immediately available areas for response. Five of the State's community colleges have Ag programs for which there is potential to expand to meet the needs for precision Ag, value-added Ag processing and meeting new business opportunities.
  - Program start-up, faculty, equipment, experiential learning, scholarships = \$10M
- Energy / Advanced Manufacturing (\$15M): multiple opportunities are available for scaling up existing programs, improving synergies across the eight institutions, and developing new programs that leverage existing expertise and capital resources. Seamless pathways need to be developed between the community colleges and the University to expand opportunities in advanced manufacturing, from two-year technical programs to four-year engineering programs. There is forecasted demand for this STEM pathway as the State looks to recruit more manufacturing companies and expand surface mining operations. More than 50 energy related credentials are currently available across the eight institutions, with opportunity for accelerated pathway development between institutions. Emerging opportunities to respond to industry and economic needs of the state include:
  - $\circ$  Power lineman = 2M
  - Hybrid Diesel Technology = \$2M
  - $\circ$  Low-voltage fiber optic implementation, wind and solar energy and storage, carbon storage, and advanced manufacturing = \$5M
  - $\circ$  Industrial programs = 6M
- **Hospitality/Tourism (\$6M)** the state is well positioned to meet current and future workforce development needs related to the hospitality, tourism, and outdoor recreation sectors; specifically, further development of degree offerings, certificate programs, and just-in-time credentials to address critical needs in workforce recruitment and retention:
  - $\circ$  WORTH Center programing = 2M
  - $\circ$  Existing curricular program expansion, faculty, equipment = 4M
- **Technology (\$5M):** a collaborative effort is underway to develop a 2-year software engineering degree with clear pathways to a 4 year degree at UW in response to statewide and national demand for software developers across all industry sectors. All 8 of the state's higher education institutions, along with international and industry partners (Wyoming based businesses) have contributed to this initiative; an initiative that will catalyze additional program development in areas such as artificial intelligence, machine learning, and cyber security.
  - $\circ$  Faculty, equipment, programming support = \$5M
- Healthcare/science/tech (\$10M): This industry represents significant opportunity for economic growth and diversification. From direct provider/clinician job opportunities, to manufacturing, advancements in medicine, and telehealth, many opportunities exist. Five of the seven community colleges identified this as an area of immediate need for workforce development:
  - $\circ$  Faculty, equipment, programming support = \$10M

#### PARTNERS

#### WIN Partner Program / Support

#### **Define Problem:**

Prior efforts have identified that cross sector collaborations are needed, but lacked the leadership and agility needed to take action. Governor Gordon recognized the critical need for the state's educational leaders to champion the response to economic needs in the state by creating the Wyoming Innovation Network.

#### How do you know this is a problem?

Building off the identification of the state's opportunity sectors from previous economic diversification initiatives, WIN is an action oriented network of decision makers that can move their respective organizations in response to the needs of the state. Better coordination and engagement of WIN's current and prospective partners presents an opportunity to more efficiently advance identified education and workforce initiatives.

#### Cause:

Educational leadership provides a non-competitive environment for multiple partners to become engaged in the response to Wyoming's economic growth agenda.

#### **Effects:**

Public, private partnerships create broad spectrum responses to existing needs and highlights areas of growth for entrepreneurship and innovation across the state. New partnerships must be prospected while identifying new ways to add value to existing relationships. Opportunities for sponsoring entrepreneurial, intrapreneurial, and innovation activities will lead to increased business growth/retention and serve as a catalyst for new business and job creation. State-wide, national, and international partners will have opportunities to sponsor projects, research, and other business strategy activities while also having access to talent via internships, externships, and other placement and career development programs with WIN partners.

#### **Key Metrics:**

Relevant program delivery translates to increased business sustainability, new business/talent recruitment, new business creation, diversification of core industries, student recruitment, sponsored faculty research and new revenue sources.

#### **Funding:**

\$2M investment:

• Organizational support for prospecting and stewarding WIN partners, identifying opportunities for sponsored engagement that leads to increased state-wide industry engagement and diversification.

## AGENDA ITEM TITLE: Program Review, Carman

### SESSION TYPE:

- □ Work Session
- □ Education Session
- $\boxtimes$  Information Item
- □ Other:

[Committee of the Whole – Items for Approval]

## APPLIES TO STRATEGIC PLAN:

- $\boxtimes$  Yes (select below):
  - $\boxtimes$  Driving Excellence
  - $\boxtimes$  Inspiring Students
  - ☑ Impacting Communities
  - ⊠ High-Performing University

# □ No [Regular Business]

□ Attachments are provided with the narrative—refer to Supplemental Materials Report.

#### EXECUTIVE SUMMARY:

Provost and EVP Carman will provide an update on the status of the proposed reorganization and program review process.

#### PRIOR RELATED BOARD DISCUSSIONS/ACTIONS:

The Board received the initial reorganization and review proposal in July 2021 and received updates on this matter in September 2021.

#### WHY THIS ITEM IS BEFORE THE BOARD:

To keep the Board informed of progress on the proposed reorganization and program review process, which it will hear final recommendations on in November 2021.

ACTION REQUIRED AT THIS BOARD MEETING: N/A

PROPOSED MOTION: N/A

PRESIDENT'S RECOMMENDATION: N/A.