Cultivar Development Research Program Guidelines

Effective Date: July 1, 2017
Review Date: November 30, 2018
Responsible Party: Technology Transfer Office

Application Deadline: First Friday in October each year

I. INTRODUCTION

The Montana State University Technology Transfer Office (MSU TTO) will set aside a portion of net revenues generated from the licensing of plant cultivars developed by dedicated plant breeding programs at MSU.

Historically, for most licensed technologies, 30% of net licensing revenues are retained by TTO to assist in supporting TTO, with the remainder being split between the inventors personally (35%) and the Office of Research (35%). This program will divert 85.7% of the funding from the Office of Research to a CDRP fund, while not affecting the portion retained by TTO or the inventors personally. Thus, in most cases, the Office of Research will receive 5% of the net licensing revenues and the CDRP fund will receive 30%.

The rationale for this program:
1. Faculty involved in breeding new plant cultivars receive less support from the university Office of Research than most faculty. Such faculty do receive significant ongoing support from state commodity boards.
2. The licensable technologies (typically, new crop varieties) that arise from the cultivar breeding programs are typically protected via PVP, with the PVP application prepared by the breeder; they do not require complicated, expensive, and risky patent prosecution to be managed by the TTO.
3. The new cultivars developed are more market-ready than technologies produced by other faculty, requiring the TTO to perform less extensive market research and marketing than typical university technologies in order to complete a license.

This program is predicated on the idea that the development of new cultivars will increase if there is financial support to advance the cultivar development program. The hope is that this reinvestment will generate more licensing revenue for MSU to support the cultivar development program, in a virtuous cycle that ultimately results in greater benefit for both MSU and the agricultural industry in Montana.
Questions about the program should be directed to the MSU Technology Transfer Office at (406) 994-7868.

II. PROGRAM GUIDELINES

Eligibility for Grants

This program is supported with funds derived from revenues from the dedicated cultivar breeding programs. Therefore, eligibility for CDRP Grants in the College of Agriculture is limited to full and part-time tenure track faculty and to permanent research scientists working to support cultivar varietal development. Visiting faculty are not eligible, nor are postdoctoral research associates or students. Proposals must include or be endorsed by at least one of the breeding program leads.

Uses of Grant Funds

CDRP funds are only for the support of cultivar development. Budgets may include support for:

1. Graduate research assistants (GRA’s) directly supporting the project. While grants are not intended to support unrelated thesis or dissertation research, GRA’s are encouraged to participate in cultivar development activities, and priority will be given to proposals that include support for such GRAs. Proposals requesting graduate student stipends should make clear the role played by a student in the project.
2. Labor costs essential to the project, such as technicians and other support staff.
3. Equipment essential to the project. For equipment >$5,000, at least one quote should be included in the proposal to ensure any funds awarded will efficiently achieve the proposal’s objectives.
4. General expenses such as supplies, materials, and services which are essential to the project.

CDRP funds are not:

1. To replace funding which should be provided by the College, MAES, or commodity groups (such as the Montana Wheat and Barley Committee) for cultivar development.
2. Intended to support the development of enabling technologies, but rather to support the application of existing technologies to produce new cultivars in existing breeding programs and to enhance the capability to generate test data on new cultivars.
3. To provide travel funds to attend professional meetings.

Proposals may be for more than one year, although annual awards will be dependent on the availability of funds.

CDRP funds not granted in a given year will be retained in the CDRP set-aside fund (i.e. rolled over), and will be made available as part of the next year’s CDRP grant program.

CDRP Grant Fund Source

Funds to be included be included in the CDRP Grant Fund will be those that meet all of the following criteria:
1) Plant cultivar was developed as part of a dedicated MSU breeding program, with the support of state commodity board funding. (As of late 2018, these dedicated breeding programs are led by Phil Bruckner, Luther Talbert, Jamie Sherman, Kevin McPhee, and Mike Giroux.)

2) The cultivar is completed by MSU and protected by PVP submitted by MSU. Germplasm or traits protected by patent are not eligible.

3) License was issued after July 1, 2017.

4) Net revenues include all revenues including license issue fees, license maintenance fees, PVP cost reimbursement, and royalties, net of direct expenses including PVP application fees, legal fees, and shipping costs (e.g. for test samples sent as part of marketing efforts).

After the close of each fiscal year, TTO will inform the College of Agriculture what funds are available in the CDRP grant program. If the fund is at least $25,000, TTO will solicit proposals from breeders in the College of Agriculture for financial support of research projects designed to promote the development of new plant cultivars. If the fund is less than $25,000, then proposals will not be solicited, and the funds will instead be rolled over to the following year.

**Deadlines**

Proposals must be submitted by the first Friday of October each year, with awards to be announced by the end of the year. Proposals should be sent to the MSU TTO, and will be reviewed by TTO, the Office of Research, and the College of Agriculture.

**III. PROPOSAL FORMAT**

It is imperative that proposals be submitted in a format which facilitates timely and efficient review. Proposals must conform to the following format, in the order given:

1. **Cover Sheet:** The first page of each proposal must be the program cover sheet, completed according to its directions and signed by the principal investigator(s).

   **Project:** Describe the nature of the proposed research in such terms that a non-specialist (such as the VPR and TTO Director) will understand. Proposals must clearly and unambiguously communicate the significance of the project in relation to cultivar development, including the expected return on investment (ROI) from the additional funding. This ROI may be expressed in qualitative terms and/or quantitative terms, and may consider how the proposed project will impact the Montana agricultural economy, the university, and/or the cultivar development program itself. Include the status of the program at this time and what should be achieved during the funding period. **Limit of two single-spaced pages.**

2. **Budget:** A detailed list of items for which funding is requested should be given, separated into the following categories:
   
   A. Graduate Research Assistants
   B. Salaries and wages (include staff benefits)
   C. General expenses (supplies, services, etc.)
   D. Equipment. Specific equipment must be listed for items over $1,000, with at least one quote provided for items over $5,000.
The proposed budget should be detailed, clearly justified, and relate to the real needs of the research. The appropriateness of the budget will be considered in evaluating the proposal. Budgets may be adjusted by the review committee. Limit of one page.

3. **Budget Justification:** Each item in the budget must be justified as an expenditure required by the project plan and not be available through existing sources. The use of the requested funds must be put in the context of the overall ongoing cultivar program, both in terms of the specific project to be accomplished, such as additional crosses, selections or screenings introduced, and in relation to the total funding support of the program. Therefore, proposers should list their current and pending funding as part of the proposal, and be specific about the expected impact of the additional requested funding e.g. the relative increase in the number of crosses, selections, evaluations, or testing to be performed, etc. Limit of one page.

4. **Reports.** If funding was received from the Cultivar Development Research Program during the previous budget year, a report must be included indicating what expenditures were made, how the funds were used and the benefit provided to the Cultivar Development Research Program over and above what would have been supported by other resources. Limit of one page (per previous proposal).

An electronic copy of each proposal should be submitted to the TTO Director (daniel.iuliano@montana.edu).

IV. EVALUATION OF PROPOSALS

The goal of this program is to advance the development of cultivars. The major points to be considered in reviewing proposals are as follows:

1. **General:**
   a. Does the proposal communicate the importance of the work?
   b. Have proposal format guidelines been followed?

2. **Significance:**
   a. Is the proposed project within a cultivar development program or will it complement such a program?
   b. Will successful completion result in improved cultivars which will have a positive impact on agriculture in Montana?
   c. How important is a CDRP grant to the program or project? For instance, will the CDRP funds be leveraged (e.g. be used as matching funds against other grants) or are the CDRP funds filling a critical need that cannot otherwise be met?
   d. Is there a strong expected Return on Investment? Consider impacts on the Montana agricultural economy, the university, and the cultivar development program itself.

3. **Project Design:**
   a. Does the proposer have the necessary background and expertise?
b. Are project activities well planned, and do they realistically fall within an appropriate timetable?

4. **Budget:**
   a. Have all items requested been justified?
   b. Is the amount requested reasonable and consistent with the total funding available to this program?
   c. If equipment is requested, has the possibility that it is already available elsewhere been explored?
   d. If support for graduate students is requested, is it clear that their activities are essential to the project?

Funding decisions will be made by a committee composed of the following (or their designates):
1) Vice President for Research
2) Dean of the College of Agriculture
3) Head of the Plant Sciences and Plant Pathology Department
4) Director of the TTO

In the case where a member of the committee is a PI or co-PI on a proposal, that member must abstain from voting on that proposal.

V. **GENERAL CONDITIONS OF GRANTS**

1. **Time Period:** Grants will ordinarily be made for a twelve-month period from January to December. Proposals may be submitted for projects requiring a longer period, but the award of funds for future years will be dependent on funding availability, and will require annual review and approval of progress made during the prior year of work.

2. **Other:** All research carried out under the sponsorship of a Cultivar Development Research Grant is subject to all of the University's standing policies regarding research.

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**APPROVED:**

[Signature]

Dr. Renee Reijo Pera
Vice President of Research and Economic Development

12-6-18

[Signature]

Dr. Charles Boyer
Vice President of Agriculture & Director of the Montana Agriculture Experiment Station

12/10/18