



IGNITE GRANT PROGRAM

(formerly known as the Applied Research Grant Programs – ARG, AR-WiTAG and PDF)

REQUEST FOR PROPOSALS AND APPLICATION GUIDELINES FOR 2020-21 PROJECTS

UW System, in collaboration with WiSys, is pleased to offer the <u>Ignite</u> Grant Program to UW System faculty and academic staff for:

- 1) applied research
- 2) prototype development

The goal of this funding is to develop advanced human potential and the knowledge economy that employs that potential. In particular, this program promotes technology transfer and economic development throughout Wisconsin and provides for broader impact beyond the state. The state legislature and the governor make approximately \$600,000 in aggregate funding available annually to support the program. The Ignite grant programs are sponsored by UW System and are administered by WiSys in collaboration with UW System. UW System makes final funding decisions.

The UW System Applied Research Grant (ARG), Applied Research-WiSys Technology Advancement Grant (AR-WiTAG), and Prototype Development Fund (PDF) Programs have been consolidated under the new name of the **Ignite Grant Program** to simplify the terminology and streamline administration.

DEADLINES

IGNITE - APPLIED RESEARCH FUNDING Required Intent to Submit December 2, 2019 Full Proposal Due...... January 27, 2020 Award Announcements..... On or before May 1, 2020

IGNITE - PROTOTYPE DEVELOPMENT FUNDING Applications must be submitted by March 1, 2020

In addition to the guidelines provided below, applicants must follow their UW institution's internal grant submission and approval process. For full proposal submissions, please ensure you have contacted your respective institution's grants office at least three weeks prior to the due date.

IGNITE - APPLIED RESEARCH FUNDING - ELIGIBILITY AND GUIDELINES

Introduction

The purpose of the Ignite funding for applied research is to encourage faculty and academic staff to apply their expertise and scholarship to the economic development of Wisconsin and further afield. Applied research activities strengthen the connection between knowledge and practice while promoting positive change in the state's economy. Potential benefits of these activities include fostering business expansion and improving profitability, creating jobs and enhancing workforce quality, reducing costs and increasing efficiency, and improving the quality of Wisconsin's products and services. Proposals are invited from faculty and staff in ALL academic disciplines, including the humanities and social sciences. Funding is available for a term of fourteen (14) months to researchers at all UW institutions. For the humanities and social sciences, potential impact could also be directed towards societal impact, quality of life, cultural or environmental impact, impact on health as well as public policy and services.

Eligibility and Award Information

Faculty and academic staff employed at least half time at UW institutions are eligible to apply. Principal Investigators may request a maximum of \$50,000 of funding per project proposal for a period of fourteen (14) months. The amount of the award will be based on the merits of the project, and will be contingent on the availability of funds. UW-Madison and UW-Milwaukee will be limited to two awards in each funding cycle. All expenditures of award monies must be made by August 31, 2021.

Applied Research Funding Intent to Submit

Applicants must submit an Intent to Submit in order to be eligible to submit a full proposal. Details including the research project title and description are required at the time of submitting the Intent to Submit. Applicants may request assistance in preparing their project proposal as well as feedback on their project description. More details can be found below on page 7. **Applied Research Funding Proposal Preparation and Submission**

Proposal Narrative Format

Applicants should use the Structured Template (Attachment A) for submission of their project proposal. Guidance notes are provided below for each section corresponding to the template. Applicants should NOT exceed page or word counts specified for each section nor should they modify any formatting of the template. 1" margins, single spacing, and font size 12 should be used for all sections. Applications that do not utilize the structured template or follow the designated format may not be considered. Applicants should use references and supporting documentation to support their proposal as appropriate. Such references and supporting documentation should be included in the designated sections of the Structured Template. For the proposal submission, the Cover Page, Budget Page, and Proposal Appendix should be submitted alongside the applicant's Proposal using the Structured Template.

Cover Page and Budget Page

For the required Cover Page and Budget Page templates, go to <u>https://www.wisys.org/form-bank</u>.

Guidance Notes for Completion of Structured Template

For the required Structured Template, go to <u>https://www.wisys.org/form-bank</u>.

Sections 1-3 of the Structured Template are intended to detail the 'why, what and how' for the proposed project. For section 1, applicants should demonstrate *why* the proposed research is important. For section 2, applicants should demonstrate *what* needs to be done in order to demonstrate feasibility and success. For section 3, applicants should demonstrate *how* this will be done. Sections 4-10 are intended to expand upon details concerning market opportunity and commercialization, competition, intellectual property, key personnel, funding history, budget as well as any other relevant information. Sections 11 and 12 provide for a designated area for scientific references and figures/tables as well as other supporting information referenced in sections 1-10.

1. Executive Summary (maximum word size – 1 page)

- Describe the problem/opportunity that is being addressed and quantify the magnitude/seriousness/extent of the problem/opportunity.
- Summarize current solutions, approaches and state-of-the-science/technology and describe the shortcomings of the current alternatives and specifically where they fail or fall short.
- Summarize briefly the solution that is being proposed and how it addresses the shortcomings of alternatives which currently exist.
- Describe the advantages of the applicant's proposed solution, and briefly quantify the economic and/or societal impact if the proposed solution is developed and realized.

Further detail on the proposed solution and technical approach should be provided in sections 2 and 3. Further detail on the associated impact and market opportunity should be provided in section 4. Technology descriptions should be brief and concise and be comprehensible to the lay reader.

- 2. Rationale, Technical Approach, and Preliminary Data (maximum word size 1 page)
 - Describe the technology and the technical approach being undertaken for the proposed solution.
 - Describe what is unique and innovative about the proposed solution, including discussion of the discovery, invention, insight, or other innovation that makes it possible and plausible.
 - Include supporting background or preliminary data and references which support the rationale of the proposed project.
 - Briefly describe the development steps needed to demonstrate that the proposed approach is feasible and/or will make measurable progress towards a viable solution with potential for economic/societal impact.
 - Identify 2 or 3 clear objectives and the quantitative goals that must be achieved in order to demonstrate feasibility of the proposed technical approach or measurable progress towards economic/societal impact (for science and technology projects, measurable progress towards commercialization).

The focus should be directed towards measurable outcomes and not just activities. Quantitative criteria on how success of the research will be judged should be included. Supporting figures/tables and references should be included in the designated sections of the Structured Template.

3. Research Plan (maximum word size – 500/objective, 1,500 maximum total if applicant details three objectives)

For this section detail up to three objectives. For each objective section, provide the following: 1) *Quantitative goal to be achieved for objective and concise description of prescriptive steps, experiments, and methodology to be carried out in order to achieve goal related to the objective; 2) Tangible milestones to be achieved towards goal/objective; and 3) Timeline to achieve milestones/goal.* Supporting figures/tables and references should be included in the designated section of the Structured Template.

4. Market Opportunity & Commercialization (maximum word size - 400)

- 4a) Applicants should describe the target markets/customers/end users of the proposed solution and/or benefit.
- 4b) Applicants should provide details regarding the potential market impact the proposed technology, innovation, or solution will have locally for the state of Wisconsin as well as the potential for broader national and global impact. Applicants should discuss whether the project has potential for impact in the near term (e.g. 1-3 years) or long-term (e.g. >3 years).
 - Science and technology proposals: Applicants should describe the economic impact including the ability to foster business expansion and improve profitability, create jobs and enhance workforce quality, reduce cost and increase efficiency, and improve quality of products and services.
 - Humanities and social sciences proposals: Applicants should describe the societal benefits of the project. These could include impact on quality of life, cultural or environmental impact, and impact on health, as well as public policy, strategy, and/or services.
- 4c) Applicants are also asked to outline a potential commercialization plan to enable the new solution and/or technology to reach the marketplace whether this is via licensing or partnering with an existing company and/or through formation of a new start-up.
 - For humanities and social sciences, applicants should outline a strategy for achieving the above societal benefits.
 - For projects with long-term economic or societal benefit (e.g. >3 years), applicants should clearly articulate the project's long-term potential and provide an outline for a strategy to realize it.

Contact your technology transfer office (WARF, WiSys, or UWMRF) for help with this section as needed (see page 13 below for appropriate contact details for each organization).

5. Competition (maximum word size – 150)

In this section, applicants are asked to describe the competitive landscape of the technology field by providing up to a maximum of three companies/technologies/products/approaches that are considered to be competing technologies to the proposed solution, including a statement regarding how the proposed solution can be differentiated from existing technologies and/or solutions.

Contact your technology transfer office (WARF, WiSys, or UWMRF) for help with this section as needed (see page 13 below for appropriate contact details for each organization).

6. Intellectual Property (maximum word size - 300)

If applicable, describe the potential for Intellectual Property (IP) protection and any agreements between partners that exist that may impact existing or future IP protection and how further agreements will be used to protect UW interests and benefits (as appropriate). Contact your technology transfer office (WARF, WiSys, or UWMRF) for help with this section as needed (see page 13 below for appropriate contact details for each organization).

7. Key Personnel

Please list up to a maximum of five key personnel. Please list their full name, role, responsibilities, and relevant qualifications. Append curricula vitae/resumes as appropriate to the Proposal Appendix. In addition, and if appropriate, describe the interdisciplinary or inter-institutional nature of the program, and any student involvement (maximum word size – 100).

A curriculum vitae (CV) is required for the Primary Investigator (PI). The PI should also include a Personal Statement within the Structured Template and include a copy of their CV as part of the Proposal Appendix. Guidance for the required Personal Statement is provided below (maximum word size for Personal Statement – 200).

Guidance for Personal Statement for PI

The PI should briefly describe why they are well suited for their role(s) in this project. The relevant factors may include aspects of training; previous experimental work on this specific topic or related topics; technical expertise; collaborators or scientific environment; and/or past performance in this or related fields.

The PI may cite up to four publications or research products that highlight their experience and qualifications for this project. Research products can include audio or video products; conference proceedings such as meeting abstracts, posters or other presentations; patents; data and research materials; databases; educational aids or curricula; instruments or equipment; models; protocols; and software or NetWare.

8. Funding History (maximum word size – 400)

In this section, applicants are asked to discuss relevant funding history including whether the proposed project is part of a current or past grant award as well as whether the PI or Key Personnel are receiving other grant funds for the project (including any internal grant funding received at a campus level). Applicants should also detail any previous UW System funding (within the past three years) and the outcome of such including any associated Invention Disclosures and related publications, abstracts, or posters submitted or presented based upon this work.

9. Budget Explanation/Justification (maximum word size - 500)

The Budget Explanation should provide justification for the requested resources and match the requirements of meeting the milestones and objectives outlined in section 3. UW System awards grant monies only in the categories of Salary (for UW System employees only), Fringes* (for UW System employees only), and Supplies & Expense/Travel, and Equipment**. For all Key Personnel, the Budget Explanation must identify whether they are UW System employees or non-UW System employees. Funds requested for non-UW System personnel via consulting arrangements, fee for service, subcontracts, or the like, should not include fringe benefits or other indirect charges from the individual or individual's organization/institution. For Other Personnel (UW System employees), the Budget Explanation must describe their role as it is categorized on their home institution. Funds for computer workstations and/or laptop computers are generally disallowed, unless they are critical to the project and used for highly justified circumstances and not just for generic use (e.g. high-powered computer workstation for computing certain levels of data). Travel expenses may only be used for collaboration and to accomplish the work described in the proposal. Publication costs and travel to conferences is not allowed. Grant monies may not be used for tuition remissions or associated fees. Additional funds from the private sector or other parties should also be listed in the separate column on the Budget Page, and their source and application should be in the Budget Explanation.

* Fringe Benefits are provided for UW System employees listed in the Budget Form. If awarded, Fringe Benefits will be covered by the GPR Fringe Benefit Pool and will be automatically transferred by UW System directly. Therefore, funds for Fringe Benefit should NOT be included in the salary requested column nor should they be included within the \$50,000 budget.

**Funds requested for a >\$5,000/piece of equipment should include a strong line of justification and it is suggested that applicants first try and access use of existing equipment on campus or throughout the UW System prior to requesting funds for any large, high value capital equipment.

10. Any Other Relevant Information (maximum word size - 250)

Applicants should use this section to detail any further information they would like to share with the review panel that has not been included in the above sections.

11. Scientific References (maximum word size – 1 page)

Applicants should use this section to include any scientific references cited in sections 1-10.

12. Supporting Information (maximum word size – 1 page)

Applicants should use this section to include any figures/tables or other supporting information related to and referenced in sections 1-10.

Proposal Appendix

The Primary Investigator's CV along with any letters of support from partners or collaborators should be compiled into one Proposal Appendix document using the sections below.

The Proposal Appendix should include the following sections and should be submitted as one PDF document. Applicants are asked not to embed documents within the Proposal Appendix.

1. The Primary Investigator's CV (required).

- 2. Any letters of committed fiscal support from partners (if available/applicable).
- 3. Letters of support from partners or collaborators to validate market need, customer interest in the proposed solution, soundness of technology and technical approach as well as the business model and/or approach that is envisioned (highly encouraged).

Multi-Institution Applications

Collaborative and interdisciplinary proposals are encouraged. For collaborative applied research proposals originating from more than one institution, the lead institution should submit the full proposal using the Structured Template, a Cover Page, a Budget Page, and the Proposal Appendix. Supporting institutions should only submit a Cover Page for their institution, a Budget Page detailing funds for their institution only, and a CV/resume for the Key Personnel. WiSys will collate these materials for the reviewers.

The UW System has a strong commitment to research and the impact of programs in the humanities and the social sciences. Proposals rooted in these fields of study that benefit the state or local regions of the state are encouraged. Examples of possible proposals in these academic areas may be found at <u>https://www.wisys.org/grants</u> and click "Ignite Grants".

Submission Guidelines

Required Intent to Submit Due on or Before December 2, 2019, before 11:59 PM CST Intents to submit can be submitted using the following link: <u>https://www.wisconsin.edu/grants-awards/ignite-grant-program-intent-to-submit-form/</u>

More information can be found on the WiSys grants page at <u>https://www.wisys.org/grants/ignitegrantprogram-appliedresearch</u>

Full proposals will only be reviewed if an Intent to Submit has been received by the above deadline. Intents to submit will be used to select reviewers and, if requested by the PI during the Intent to Submit submission, to provide feedback on the proposal. Requested feedback will be provided before December 20, 2019.

Full Proposals Due on or before January 27, 2020, before 5:00 PM CST

Full proposals must follow your institution's established process for submitting and approving grants. Please ensure you have contacted your respective institution's grants office at least three weeks prior to the January 27th due date.

Submit the following (PDF, Excel, and Word documents) via email to <u>grants@wisys.org</u>. Please copy your respective research office administrator on your submission.

- 1. Signed Cover Page (PDF).
- 2. Completed Structured Template for Proposal Narrative (Word Document).
- 3. Budget Page (Excel Sheet).

4. Proposal Appendix (including sections for CVs, and any letters of support). Submit Proposal Appendix as one combined PDF document.

Proposal Review

All Ignite - Applied Research Funding proposals are reviewed by an external review panel consisting of both business and technical/content experts from varied disciplines as well as representatives from WiSys and the UW System.

Primary Evaluation Criteria Checklist

Proposals for Ignite - Applied Research Funding will be read and evaluated against the following criteria. The overall rating will reflect the evaluator's assessment of how well the project addresses each of these areas.

1. The project fits the core purpose of the grant program: to apply research and scholarship to the economic development of the state. The economic benefit must be tangible and measurable. For projects with long-term economic benefit, applicants should clearly articulate the project's long-term potential and provide an outline for a strategy to realize it.

2. The project has potential for significant economic impact within Wisconsin as well as potential for national and global impact in one or more of these areas:

- Fostering business expansion and/or improving profitability.
- Helping to create jobs and/or enhance the work force.
- Reducing costs and/or increasing efficiency and productivity and/or improving sustainability.
- Improving the quality of products, services, or the working environment.
- Commercial adoption of a new technology, process, knowledge or concept.
- Creating positive change in Wisconsin's cultural/natural environment.
- Promoting the competitiveness of business.
- Demonstrable collaboration with industry.

3. The proposed project demonstrates creativity and/or innovation, can be clearly differentiated from existing approaches/solutions and, in the case of science and technology applications, appropriately addresses issues of intellectual property (IP), technology transfer, and commercialization with the assistance of WiSys, WARF or UWMRF (see page 13 below for appropriate contact details).

- The project idea is new and compelling.
- Proper procedures are in place for protection of IP.
- Industrial or other partnership agreements protect UW interests and have long-term benefit.

4. The Principal Investigator (PI) employs a robust, appropriate research design with proper, measurable milestones and a feasible timeline. The project offers opportunity for student involvement.

5. There is a high likelihood of successful project completion within the grant period.

- The project is technically feasible and has realistic objectives.
- The project is likely to yield meaningful outcomes within the grant period.
- The project has the active support of private sector or other partners.

• The project is sustainable or has the potential for extramural funding for further development.

6. The project includes well-developed milestones and metrics for evaluating its impact at the end of the grant period.

7. The budget is cost-effective and appropriate to the scope of the project. The budget limit for Ignite applied research awards is \$50,000 for a fourteen (14) month project. For collaborative proposals from multiple institutions, exceptions to the budget limit will be reviewed on a case-by-case basis.

Final Report

All award recipients shall provide a final report to the UW System and WiSys. A final report is due by September 30, 2021. The final report template (Attachment B) should be used to describe the extent to which the research has advanced the resulting technology or solution and provide quantitative and qualitative measures of success.

PROTOTYPE DEVELOPMENT - ELIGIBILITY AND GUIDELINES

In addition to the submission guidelines below, please follow your institution's grant submission process.

Introduction

The purpose of the Ignite funding for prototype development is to provide financial assistance for supporting research and development intended to advance the commercial potential of technologies developed through the UW System and assigned to WiSys. WiSys supports the creation and transfer of innovations from the UW System to the marketplace with the aim of building a culture of innovation for a better future. WiSys is a 501 (c)(3) supporting organization of the UW System, supporting the 11 four-year regional comprehensive campuses. All grant proposals received are reviewed by WiSys and UW System on the basis of established evaluation guidelines.

Eligibility and Award Information

Faculty and academic staff employed at least half time at one of the UW comprehensive institutions, are eligible to apply for the grant. UW-Madison and UW-Milwaukee faculty and staff are not eligible to apply.

To be eligible for Ignite funding for prototype development, inventors must disclose their technology and assign their intellectual property rights to WiSys. **To submit an Invention Disclosure Report,** contact WiSys at (608) 316-4034, 401 Charmany Drive, Suite 205, Madison, WI 53719, or submit your IDR electronically. Go to <u>www.wisys.org</u> and click on the "Realize Your Idea" tab.

Examples of research activities the program will support

Examples include prototype development, preparation of samples for evaluation, and application testing.

Funding level and period

Applications are funded at a level necessary to achieve research objectives as determined through consultation with WiSys. Typical awards range between \$5,000-\$15,000 and average about \$10,000. Funds are awarded based on a review and approval process as described below. All expenditures of award monies must be made by June 30, 2021. If an extension of funding is desired, the request should be made by June 14, 2021, by emailing grants@wisys.org and apei@uwsa.edu. Principal Investigators requesting extensions should provide justification for the extension as well as a new proposed end date. UW System will review the request and approve or deny. Please note that, except in rare circumstances, extensions will not be granted beyond August 31, 2021. Grant monies may not be used for tuition remissions or associated fees. Funds for computer workstations and/or laptop computers are generally disallowed, unless they are critical to the project and used for highly justified circumstances and not just for generic use (e.g. high-powered computer workstation for computing certain levels of data). Travel expenses may only be used for collaboration and to accomplish the work described in the proposal. Publication costs and travel to conferences is not allowed.

Review process

Once submitted, WiSys evaluates the application and makes recommendations to UW System. Recommendation criteria are based on licensing potential as well as scientific and technical merit.

Evaluation criteria

The overall rating will reflect the evaluator's assessment of how well the project addresses each of these areas:

- The project fits the core purpose of the grant program: to increase the industry attractiveness and advance the licensability of the technology disclosed and assigned to the WiSys through the development of prototypes, demonstrations and/or generation of data that enables commercially important Intellectual Property claims.
- The Principal Investigator (PI) employs a robust, appropriate prototype development/project design that has a high likelihood of success within the defined project period.
- The PI demonstrates that they have the capability, expertise and resources to accomplish the project and deliver the prototype to WiSys.
- The budget is cost effective and appropriate to the scope of the project. The budget limit is \$15,000.
- The project is likely to yield meaningful outcomes within the grant period.

Guidelines for Ignite Full Applications for Prototype Development Funding

Full proposals must follow your institution's established process for submitting grants.

Submitting your Full Application

Full applications may be submitted at any time to WiSys. Further instruction on how to submit your proposal can be found at the below link: https://www.wisys.org/grants/ignitegrantprogram-prototypedevelopment

Applications must be submitted by March 1, 2020

Full Application format

Grant applications shall include the required Cover Page, Budget Page, and Proposal Narrative. For required forms, go to https://www.wisys.org/form-bank.

The Proposal Narrative should be organized into the following sections, with sections 1-5 not to exceed a combined length of seven pages:

- 1. Description of the link to a technology disclosure accepted and assigned to WiSys.
- 2. Research objective/problem statement.
- 3. Description on how the research will advance the WiSys-assigned technology.
- 4. Description of the research design/procedure.
- 5. Budget narrative and summary including any subcontract and its budget.
- 6. Letters of committed fiscal support from private sector or other partners.

Additional funds from the private sector or other parties should also be listed in a separate column on the Budget Page, and their source and application explained. State whether the current proposal is also being considered for Ignite – Applied Research Funding.

<u>Final report</u>

All award recipients shall provide a final report to the UW System and WiSys. A final report is due by August 31, 2021. The final report should describe the extent to which the research has advanced the correlating WiSys technology and provide quantitative and qualitative measures of success. If space permits, descriptions of the attainment of other project objectives are also welcome. WiSys will provide a final report template for award recipient's use. The report should be no more than two pages in length and include the following:

- A brief non-technical project description.
- A clear statement of project objectives.
- A statement describing the results of the project.
- The relationship of the project to the existing WiSys technology.
- An indication of whether there is intent to seek further funding for research in this area.
- A statement regarding any success in licensing the technology by WiSys due to prototype development.

TECHNOLOGY TRANSFER ORGANIZATION CONTACT INFORMATION

UW-Madison

UW-Madison technology transfer is handled by the Wisconsin Alumni Research Foundation (WARF).

General contact information:

614 Walnut Street, 13th Floor Madison, WI 53726 608-263-2500 www.warf.org

For a list of WARF Intellectual Property and Technology Commercialization Managers and their areas of expertise see:

www.warf.org/about/staff.jsp

UW-Milwaukee

UW-Milwaukee technology transfer is handled by the University of Wisconsin-Milwaukee Research foundation (UWMRF).

General contact information is:

1440 East North Avenue Milwaukee, WI 53202 414-906-4653 www.uwmresearchfoundation.org

UW Comprehensive Institutions

For all other UW institutions, technology transfer is handled by WiSys. General contact information:

401 Charmany Drive, Suite 205 Madison, WI 53719 608-316-4034 www.wisys.org

For a list of WiSys Staff see: http://www.wisys.org/about-us/who-we-are-home

Additional Information

Additional information may be obtained from your technology transfer representative or grant office.

GENERAL INFORMATION ABOUT THE IGNITE GRANT PROGRAM

UW System and WiSys will maintain full confidentiality of all submitted grant proposals and documents. Titles, PI names, grant names, and abstracts of awarded grants will be published online and used in subsequent reporting by UW System.

Diversity in terms of geographic region, type of economic impact, institutional affiliation, and disciplinary field will be considered.

Based on an estimate of available funds, those who have submitted applications will be informed of their status by May 1, 2020. However, official final funding determinations will be conveyed to eligible applicants in July 2020, or later, when the state releases the funds. Neither WiSys nor UW System is responsible for any lapse in funding based on state budget decisions.

All proposal documents become the property of UW System.

During the course of the project, the PI has an obligation to notify UW System and WiSys of any issues that may substantially affect project milestones and/or budget requirements.

For general questions regarding award notification and post-award changes contact:

UW System 608-262-8778 apei@uwsa.edu

For all other questions contact: Jennifer Souter Associate Director WiSys 608-316-4131 jennifer@wisys.org