

APPLIED RESEARCH GRANT PROGRAM (ARG)

AND

**APPLIED RESEARCH-WiSys TECHNOLOGY ADVANCEMENT
GRANT PROGRAM (AR-WiTAG)**

AND

PROTOTYPE DEVELOPMENT FUND PROGRAM (PDF)

**REQUEST FOR PROPOSALS AND
APPLICATION GUIDELINES FOR 2017-18 PROJECTS**

DEADLINES

ARG and AR-WiTAG Proposals

Required Intent to Submit Email.....December 18, 2016

Full Proposal Due.....January 29, 2017

Award Announcements..... On or before May 1, 2017

PDF ProgramApplications may be submitted at any time

In addition to these guidelines, please follow your institution’s grant submission process.

UW System, in collaboration with WiSys Technology Foundation, Inc. (WiSys), offers three research grant programs to UW System faculty and academic staff:

- 1) **The Applied Research Grant (ARG)**
UW System competitive grant program
- 2) **The Applied Research - WiSys Technology Advancement Grant (AR-WiTAG)**
UW System - WiSys competitive grant program
- 3) **The Prototype Development Fund (PDF)**
UW System – WiSys non-competitive grant program

The goals of all three programs are to develop advanced human potential and the knowledge economy that employs that potential. In particular, the ARG, AR-WiTAG, and PDF programs help to promote technology transfer and economic development throughout Wisconsin. The state legislature and the governor make approximately \$600,000 in aggregate funding available annually for the support of these programs. UW System makes final decisions on grant funding.

Introduction

Applied Research Grant (ARG)

The purpose of the **Applied Research Grant** program is to encourage faculty and academic staff to apply their expertise and scholarship to the economic development of Wisconsin. Applied research activities improve 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 one year to researchers at all UW institutions. For the humanities and social sciences, in addition to the benefits outline above, potential impact could 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 one fiscal year. The amount of the award will be based on the merits of the project, and will be contingent on the availability of funds. All expenditures of award monies must be made by June 30, 2018. If an extension of funding is desired, the request should be made by June 15, 2018. For each funding cycle, there is a limit of two ARG awards to an institution or to a lead institution (in the case of a collaborative proposal).

Applied Research – WiSys Technology Grant (AR-WiTAG)

The purpose of the **Applied Research-WiSys Technology Advancement Grant (AR-WiTAG)** program is to encourage faculty and academic staff from SCIENCE AND TECHNOLOGY fields to apply their expertise and scholarship to the economic development of Wisconsin through the development of high-value intellectual property and/or marketable products. Projects that address a clear and unmet need from industry are strongly encouraged.

Eligibility and Award Information

UW-Madison and UW-Milwaukee are not eligible for AR-WiTAG awards. However, UW-Madison or UW-Milwaukee faculty may collaborate on AR-WiTAG proposals submitted by faculty or academic staff employed at least half time at UW institutions other than UW-Madison and UW-Milwaukee. Principal Investigators may request a maximum of \$50,000 of funding for a period of one fiscal year. The level of awards will be based on the merits of the project and will be contingent on the availability of funds. All expenditures of award monies must be made by June 30, 2018. If an extension of funding is desired, the request should be made by June 15, 2018. There is no limit on the number of AR-WiTAG awards to an institution per funding cycle.

ARG and AR-WiTAG Proposal Preparation and Submission

Proposal Format

Applicants should use the Structured Template (Appendix A) for submission of their project proposal. Further guidance notes are provided below for each section corresponding to the template. Applicants should NOT exceed word counts specified for each section nor should they modify any formatting of the template (e.g. font type/size/spacing etc). For the proposal submission, the Cover Page and Budget Page should be uploaded with the Structured Template along with any other appendix materials.

Cover Page. For the required Cover Page template, go to <https://www.wisys.org/form-bank>, and click “ARG/AR-WiTAG/PDF Cover Page”.

Budget Page. For the required Budget Page template, go to <https://www.wisys.org/form-bank>, and click “ARG, AR-WiTAG & PDF Budget Form”.

Guidance Notes for Completion of Structured Template.

1. Executive Summary (maximum word size – 500).

State the technology or innovation, solution to problem, the product and/or benefit that will be created, and the aggregate impact that can be achieved upon successful development of the product and/or technology. Technology descriptions should be brief and concise and be comprehensible to the lay reader.

Arrange this section as follows:

- Introduce this section by providing a brief background of the technology field including a short description of the proposed research and why it is useful - e.g. what problems does it solve and/or what opportunities does it create?
- Describe the intended application for the proposed project idea, technology, or solution and how it is superior to existing products or solutions on the market. In other words, what is its anticipated competitive advantage?
- Describe the market for the technology to be developed and the basic approach on how the product or solution would be commercialized. Who are the customers and end users, and what is the market-size?
- Conclude this section by describing the goals to be achieved over the course of the proposed project.

2. Current Research & Other Relevant Information.

For this section, applicants are asked to summarize current research and other relevant information (within the last three years) which is related to the proposed project. Applicants are asked to provide an annotated list of the top three publications by third parties which are most relevant to the proposed research to aid in the preparation of a technical brief for the review committee which will be used to establish the competitive landscape of the technology field.

3. Research Plan (maximum word size – 500/objective, 2,500 maximum total if applicant details five objectives).

For this section, define the objectives for this project. Identify and detail up to a maximum of five specific, measurable, and time-based objectives along with corresponding milestones and a description of the experiments to be undertaken. Performance evaluations of these milestones will be used to determine the success of your project. Milestones are planned outcomes that, when met, help verify the progress toward accomplishing the goals and objectives of the project. They track progress on a time scale and allow informed decisions to be made about the future of the program.

“Study,” “optimize,” “investigate,” etc. are common research activities but for applied research projects it is better to describe the research using terms such as “establish” some specified or target level of performance, “achieve” some measured selectivity or specificity, etc. The focus of the proposed project should be on achieving targeted outcomes, not just performing activities in your research description.

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

In this section, applicants should describe the potential market impact the proposed technology, innovation, or solution will have both locally for the state of Wisconsin and further afield. For 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, impact on health as well as public policy, strategy and/or services. 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 or through formation of a new start-up. For humanities and social sciences, applicants are asked to outline a strategy for achieving the above societal benefits.

Contact your technology transfer office (WARF, WiSys, or UWMRF) for help with this section as needed (see page 11 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. List up to a maximum of three companies/technologies/products that are considered to be competing technologies to the proposed solution, including a statement regarding how your 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 11 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 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 11 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. Upload curricula vitae/resumes as appropriate. In addition, and if appropriate, describe the interdisciplinary or inter-institutional nature of the program, and any student training opportunities (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 Appendix A. 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. Note the following additional instructions:

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 ARG/AR-WiTAG funding (within the past three years) and 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. UW System awards grant monies only in the categories of Salary (for UW System employees only), Fringes (for UW System employees only), Supplies & Expense, Equipment*, and Travel. For all Key Personnel, the Budget Explanation must identify whether they are UW System employees or non-UW System employees. For Other Personnel (UW System employees), the Budget Explanation must describe their role as it is categorized on their home institution. Travel expenses may only be used for collaboration and to accomplish the work described in the proposal. Travel to conferences is not allowed. Grant monies may not be used for tuition remissions or associated fees. Additional funds from 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.

*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.

Appendix. The Appendix should include the Primary Investigator’s CV and any letters of committed fiscal support from partners. In addition, Letters of Support should be provided 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 or approach that is envisioned.

Multi-Institution Applications

For collaborative ARG or AR-WiTAG proposals originating from more than one institution, the lead institution should submit the full proposal including a Cover Page and a Budget Page. Supporting institutions only submit a Cover Page, a Budget Page for their institution, 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. Applied Research Grant proposals rooted in these fields of study that benefit the state or local regions of the state are encouraged. Four examples of possible Applied Research Grant proposals in these academic areas may be found at <https://www.wisys.org/grants> and click “Applied Research Grant”.

Submission Guidelines

Required Intent to Submit Email Due On or Before December 18, 2016, before 11:59 PM CST

Send an email to BOTH grants@wisys.org and afgp@uwsa.edu that summarizes the proposal’s goals and the research plan (maximum word size – 500). Full proposals will only be reviewed if an Intent to Submit Email has been received. This email will be used to select reviewers and, if requested by the PI, to provide feedback on the proposal. Requested feedback will be provided before January 4, 2017.

Full Proposals Due on or before January 29, 2017, before 12:59 PM CST

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

Submit the following as searchable PDFs via email to grants@wisys.org.

1. Signed Cover Page
2. Completed Structured Template for Project Proposal
3. Budget Page
3. Appendix (including CVs and any letters of support).

Proposal Review

All ARG and AR-WiTAG proposals are reviewed by an external review panel consisting of both business and technical experts from varied disciplines as well as representatives from WiSys and the UW System.

Primary Evaluation Criteria Checklist

Proposals for ARG and AR-WiTAG 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.
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.
 - Creating positive change in Wisconsin's cultural/natural environment.
 - Promoting the competitiveness of business.
3. The proposed project demonstrates creativity and/or innovation 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.
 - 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 solid, appropriate research design with proper, measurable milestones. The project offers opportunity for student training.
5. There is a high likelihood of successful project completion.
 - 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 ARG and AR-WiTAG awards is \$50,000 for one year. For collaborative proposals from multiple institutions, the combined request may be a reasonable amount over the budget limit.

Final Report

All award recipients shall provide a final report to the UW System and WiSys. A final report is due by August 30, 2018. The final report template (Appendix 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 FUND ELIGIBILITY AND CONDITIONS

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

Introduction

The joint UW System-WiSys Prototype Development Fund (PDF) program is administered through UW System 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 Technology Foundation, Inc. (WiSys). WiSys is the designated intellectual property management organization for the UW System's 11 comprehensive institutions, 13 UW Colleges, and UW-Extension. 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, UW Colleges, or UW-Extension are eligible to apply for the grant. UW-Madison and UW-Milwaukee faculty are not eligible to apply.

To be eligible for a PDF award, 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 www.wisys.org and click on the "Realize Your Idea" tab.

Examples of research activities the PDF 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. PDF funds are awarded based on a review and approval process as described below.

All expenditures of award monies must be made by June 30, 2017. If an extension of funding is desired, the request should be made by June 15, 2017. Grant monies may not be used for tuition remissions or associated fees.

Review process - Once submitted, WiSys evaluates the application and makes recommendations to UW System. Recommendation criteria are based on licensing potential and 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 Technology Foundation, Inc. through the development of prototypes, demonstrations and/or generation of data that enables commercially important Intellectual Property claims.
- The Principal Investigator (PI) employs a solid, appropriate prototype development/project design that has a high likelihood of success within the defined project period.
- The PI appears to 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 PDF Full Applications

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 Technology Foundation, Inc. There are three ways to submit your full application:

Send two hard copies by mail to:

WiSys Technology Foundation
401 Charmany Drive, Suite 205
Madison, WI 53719

OR

Email your searchable PDF application to grants@wisys.org.

OR

Submit online at <http://www.wisys.org/grants/prototype-development-fund>

PDF Full Application format

Grant applications shall include the required Cover Page and the required Budget Page.

The application 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 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 an ARG or AR-WiTAG grant.

Final report

All award recipients shall provide a final report to the UW System and WiSys. A final report is due by August 30, 2017. 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. 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 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 Managers and their areas of expertise see:

www.warf.org/about/staff.jsp

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

For all other University of Wisconsin institutions technology transfer is handled by WiSys Technology Foundation, Inc.

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

**GENERAL INFORMATION ABOUT THE APPLIED RESEARCH GRANT
PROGRAMS (ARG, AR-WiTAG, PDF)**

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

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, 2017. However, official final funding determinations will be conveyed to eligible applicants in July 2017, 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 the University of Wisconsin 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 the preparation of a proposal, award notification, and post-award changes contact:

D.A. Dirks, Ph.D.
UW System Administration
608-262-8778
afgp@uwsa.edu

For all other questions contact:

Jennifer Cook
Associate Director
WiSys Technology Foundation, Inc.
608-316-4131
jennifer@wisys.org