ADVANCE 2 FUND AN INTERNALLY FUNDED INNOVATION COMPETITION

1. OVERVIEW

The Advance 2 Market Fund (A2M) awards are made from funds provided by the Office of the Vice-President (Research). They are intended to support the cost of projects that will advance innovative research results towards application and commercialization and to provide an incentive to validate and develop commercial opportunities for the investigator's research. The competitions are for one-time projects based on existing research initiatives. Applicants can only receive one grant per type of project or technology.

Normally, projects are based on a technology, a concept, a process, or an artistic piece that has been disclosed to Western's Technology Transfer Office by way of a Report of Invention (ROI) (see Section 6 for information on required forms). Other categories of projects, such as copyrighted material, will also be appended to an ROI.

Projects are expected to be of short duration (6-12 months) and designed to advance the technology readiness level of the invention. They are also expected to bridge the gap between research results and existing proof of principle grants such as the CIHR POP or the NSERC i2i programs. The applicant will have to demonstrate the need in the marketplace, as well as a method to meet that need, i.e. a marketing plan.

Funding of up to \$100,000 is available; awards are at the discretion of the review committee. General conditions governing eligibility to apply, supportable research fields, and use of grant funds will be in conformity with Tri-Council guidelines. This funding is repayable only if there is a positive commercial outcome, similar to the way patent expenses, and other soft costs incurred by Western towards commercialization would be.

All applicants are encouraged to take advantage of the optional training that will offered for all applicants to help develop a commercialization plan and presentation. Applications and presentation will be evaluated on how the work supports the intended commercialization strategy by a panel of external reviewers.

Western's Technology Transfer Office personnel are available to assist with the structuring of the application or for consultation on issues related to intellectual property, marketing intelligence and commercialization strategy. Applications must offer a clear rationale for the proposed work that have defined milestones (tasks and timing of those tasks) and expected outcomes, exhibit the innovation pathway, and contain a budget explaining how the money requested will be spent.

To begin the application process, a Letter of Intent (LOI) and a Report of Invention (ROI) must be submitted to for review. If accepted by the review committee, an invitation to submit an application will be issued to the principal applicant. All applications must have Dean and Chair signature approval and include a ROLA proposal submission.

2. ADMINISTRATION

The A2M Competition is administered by the Western Technology Transfer Office.

All completed LOI's and Application Forms must be submitted. Original ROI submissions are forwarded directly to the Technology Transfer Office through the Inventors Portal.

3. ADJUDICATION

The Review Committee, a select group of seasoned business leaders selected for their expertise in technology commercialization will serve as the A2M adjudicators and advisors to the Associate Director of New Ventures in Western Technology Transfer Office (on behalf of the Vice-President, Research). The Associate Director will sit as an ex- officio member throughout the A2M review committee process. Selected applications will be subjected to review by business leaders and professionals with expertise in technology transfer and commercialization.

Top six applications will be selected for presentation to the review committee where they will have 5 minutes to present their project followed by a Q & A and an event that will be open to the public.

All applications will be treated with confidentiality and all reviewers are subject to a non-disclosure and confidentiality agreement. If the assigned BDM at the Western Technology Transfer Office feels the public presentation poses a risk to the IP protection strategy alternative arrangements will be made.

4. ELIGIBILITY

A PI must hold an academic appointment with a significant research component at Western University or at one of Western's affiliated university colleges with an additional appointment to Western (either through a Western academic department or the School of Graduate and Postdoctoral Studies in the general area of the proposed work) at the time of the application. Professors Emeritus/Emerita may be eligible, depending on their appointment. In order to be named as PI on an internal grant, the applicant must be eligible to hold a research account at Western. All internally funded grants will be administered only at Western University. Should the awardee cease to be a faculty member of the University during the tenure of the award, the award will be cancelled, and all remaining and recoverable monies returned to the common fund.

Researchers at the affiliated research institutes will work through their own Business Development Office and applications will be brought through the Technology Transfer Office to the review committee after all matters relating to inter-institutional sharing have been resolved. The Inter-institutional Sharing Agreement will be appended to the application.

Types of Projects

This is not an exhaustive list but rather a list of examples of projects that might be proposed, as long as they meet the objectives described above:

- Early or preliminary proof of principle demonstration of an invention with a potential market;
- Refining and implementing industrial designs;
- Conducting field studies or initial activity indications (say in vitro or in vivo);
- Producing samples for commercial or demonstration purposes;

- Building engineering prototypes;
- Performing beta trials;
- Confirming in human cell lines, mechanisms of action discovered in animal models;
- Developing an antibody for a receptor that could be used as a therapeutic;
- Testing the potential of a new software, learnware or multimedia product.

The following parameters are provided to better understand what the Selection Committee is looking for in terms of "commercialization readiness."

In the Life Sciences:

- The intellectual property (IP) should have been disclosed and assigned [see section 10.1] to Western (or affiliate) according to UWOFA Agreement and patenting process underway
- The prior art patent search must confirm freedom to operate
- There must be a significant application and potential, even if in a niche market
- A clear pathway to Industry must be in sight
- A clear assessment of the development roadmap with costs and risk analysis must be completed
- Potential licensees or other alliances or strategies must have been identified but do not need to have been tested
- The proposal must demonstrate how it will bridge to other existing programs i.e., CIHR-POP or NSERC- i2i
- The Technology Transfer Office (or equivalent in affiliated research institutes) should have been involved in the development of the proposal from the outset

In Engineering, Medical devices or Sciences

- The intellectual property (IP) should have been disclosed and assigned [see section 10.1] to
 Western (or affiliates) according to UWOFA Agreement and patenting underway, or protecting in
 cases of copy-righted materials
- A clear vision of the barrier of entry should be provided (software cases can be either patentable or copyrighted depending on jurisdictions)
- If patentable, prior art patent search must confirm freedom to operate
- The need in the marketplace must be clearly illustrated and quantified, together with a competitive analysis of the business environment
- A clear development path, including the prototyping stage must be proposed
- Potential licensees or other alliances or strategies must be identified
- The strategy must lead rapidly to an NSERC i2i if appropriate
- The Technology Transfer Office (or the Business Development Offices in the case of the affiliates) should have been involved in the development of the proposal from the outset.
- To be eligible, an underlying invention or innovative IP must be the underpinning of the project

In Arts, Humanities and other areas

- The intellectual property (IP) should have been disclosed and assigned [see section 10.1] to Western (or affiliates) according to UWOFA Agreement and protection process underway (as needed for cases of copy-righted materials)
- A clear vision of the barrier of entry should be provided (software cases can be either patentable or copyrighted depending on jurisdictions)
- If patentable, prior art patent search must confirm freedom to operate

- The need in the marketplace must be clearly illustrated and quantified; a competitive analysis of the business environment will be required
- A clear development and distribution path, including the prototyping stage or direct production for an Art Works, must be proposed
- Potential licensees or other alliances or strategies must be identified for commercialization or reaching the market
- The strategy must lead to the viability of the proposal if it gets funded and possibly next sources
 of financing if required
- The Technology Transfer Office (or the Business Development Offices in the case of the affiliates) should have been involved in the development of the proposal from the outset
- To be eligible, the underlying IP must be fundamental to the project

5. SELECTION CRITERIA

These are the main parameters that will guide the Selection Committee. The applicant will have to demonstrate:

- Opportunity Assessment
 - Validation of commercial potential;
 - Industry interest/partnership;
 - Novelty and inventiveness;
 - o Commercial potential and impact for Western and its community;
- Commercialization Plan
 - Clarity and focus of objectives and milestones to reach the market;
 - o Technical complexity, technical risk, and feasibility;
 - Appropriateness of work plan, milestones, and deliverables;

An application demonstrating technology readiness for a given market will normally receive preference under the A2M program.

6. FORMS

The Report of Invention (ROI) must be submitted through the inventors portal, Letters of Intent (LOI) and application forms must be completed, signed and summitted via the <u>online form</u>. All forms can be found on the <u>Advance 2 Market fund</u> page of the Research Western website.

6.1 Report of Invention (ROI)

Submitted through the online Inventors portal on the Research Western website.

6.1.1 ROI

For help in completing the ROI (which captures the essence and circumstances of the invention or creation) and information on the <u>assignment of commercial rights</u>, contact your assigned Business Development manager at the Technology Transfer Office or email: wtt@uwo.ca.

6.2 Letter of Intent (LOI)

LOI's must be complete and submitted via the online form

NOTE: Applicants asked by the Technology Transfer Office to "resubmit" their full application do not need to submit another LOI (the previously submitted LOI will stand). However, a new ROLA Proposal must be completed and submitted on the <u>Advance 2 Market Fund</u> page on the Office of Research Services website.

LOI's should indicate the general scope of the proposed project and must be submitted in order to submit a full application. VPR and Chair signature approval are required.

6.3 Full Application

Applications must be complete and submitted via the online form

A representative from Western's Technology Transfer Office will contact all successful applicants who have been selected to move on to the full application within 2 weeks of the LOI deadline. All applicants are encouraged to take or send a delegate from their research team to take training that will be offered to support the creation of the commercialization plan for the application, but it is not required.

The application form must be completed along with a slide deck to support a presentation to the adjudication panel.

The assigned BDM from the Western Technology Transfer Office will support the application by:

- Providing guidance on a suitable IP strategy thought the ROI review (including the disclosure risk to a presentation)
- Reviewing the draft application and presentation assuming they receive the material at least 2 weeks in advance of the deadline

It is the responsibility of the researcher to ensure that all conditions are met and that the application is complete, signed and submitted electronically to the Western Technology Transfer Office via the online form by the required date. Applications considered difficult to read due to photo-reduction or small typeface may be returned without review. The application must include the applicant's Tri-Council (SSHRC NSERC or CIHR) CV Module (a PDF version should be emailed).

6.3.1 Application submission

Complete application should be submitted via the <u>online form</u>. Any additional pages (i.e., letters of support, air/train fare quotes, etc.) must be either uploaded as separate attachments or inserted at the end of the application.

6.3.2 Research On-line Administration (ROLA) Proposal

Applicants must also complete and submit a <u>ROLA</u> Proposal which must be approved by the Academic Chair and Dean using the electronic submission process. **Email the complete application to appropriate contact for Dean's approval in ROLA.**

7. HUMAN RESEARCH ETHICS, ANIMALS, & BIOHAZARDS

All research proposals involving ethics (human subjects), animal subjects or biohazardous materials must be approved by the appropriate Western certification review committee. Applicants must indicate whether they require approval for the use of human or animal subjects or biohazardous materials under the *Certifications* tab of their ROLA proposal. If awarded, funds will be encumbered, and the work may not commence until appropriate approvals are officially confirmed with the applicable oversight committee(s) and noted in the ROLA grants system. For more information on the certification approval process, please visit the relevant Human Research Ethics, Animal Use, or Bio Hazard websites.

8. FREQUENCY OF APPLICATION

Calls for Letters of Intent will be made twice a year. Deadlines can be found on the <u>Advance 2 Market Fund</u> page on the Office of Research Services website. A faculty member may submit one application per fiscal year to the A2M competition. In addition, applicants can only receive one grant per type of project or technology.

9. PROJECT TIME PERIOD

Grants will be available for a period of up to one year from the starting date. Upon termination of an award, any unspent balance will revert to the common fund. Extensions may be granted in special circumstances upon written request to the Office of Research Services (intgrant@uwo.ca).

10. REQUIREMENTS

10.1 Conditions of Acceptance

Intellectual Property (IP) will be assigned to The University of Western Ontario prior to release of funds and any IP developed during the course of the project will have to be diligently reported to the Technology Transfer Office (or its equivalent organization in affiliated institutions).

10.2 Quarterly Meetings

Project status will be reviewed during quarterly meetings with either the technologies assigned BDM or delegate assigned by the Technology Transfer Office.

10.3 Final Report

Within three (3) months of the termination of the award, awardees must submit one electronic copy of a brief report of 1 or 2 pages (or ROI if new IP was produced) in Word format to intgrant@uwo.ca on what was accomplished during the grant project. An email reminder will be sent to you one month prior to this due date. Any new IP resulting from this work will be assigned to Western.

The report template can be found on the <u>Advance 2 Market Fund</u> page on the Office of Research Services website

(https://www.uwo.ca/research/funding/internal/advance2market.html). Failure to participate in the quarterly meetings or complete final reports or to assign any new IP may jeopardize a faculty member's eligibility for future internally funded competitions.

11. RESTRICTED/UNRESTRICTED FUNDS

For each award, an account will be set up as an "unrestricted research account." Investigators are expected to expend the funds in the manner proposed in the original request. Proposed changes to the budget in excess of 10% of the original award are to be submitted in writing to the Office of Research

Services (<u>intgrant@uwo.ca</u>) and are subject to approval. In the event that an award is less than the amount requested, the principal investigator is free to move monies from one category to another to make up a shortfall, but not into categories specifically disallowed by the review committee. Approval for new categories may be granted in special circumstances upon written request to the Office of Research Services (<u>intgrant@uwo.ca</u>).

11.1 Ineligible Expenses

- Graduate student support
- General computing equipment/software
- Funds for travel to attend conferences

12. BUDGET

12.1 Budget Envelope

Budget envelopes will be set at the level granted by the selection committee.

12.2 Budget Justification

An adequate budget justification is required in each application. To avoid arbitrary decisions on the appropriate level of funding, detailed explanations of costs must be provided.

12.3 Personnel

Western University will be the employer of any staff hired using project funds; therefore, researchers must pay appropriate wages and include benefits at established rates. To find current benefit charge rates, see Source Deduction Rates on the HR Services website (see Researcher Toolbox).

The employment category for "research assistants/associates" has the widest flexibility in pay levels and is the most difficult in which to determine appropriate levels. Colleagues, your department, or Human Resources can be a good source of information.

The budget justification must include a description of the duties of the personnel requested, the required qualifications, and an explanation as to why the position is necessary to the project. Workload should be shown to justify the amount of time the person will be employed on the project. The hiring of professional research staff is preferred; however, postdocs may be considered if appropriate rationale is provided.

12.4 Equipment

All equipment purchased with internal grant funds becomes the property of Western University. Written quotes, or advertisements giving prices, must accompany the application.

12.4 Supplies & Services

Whenever appropriate, numbers of units and unit costs should be explained. Quotes from suppliers should be provided for purchased services, e.g., computing or consulting fees.

12.4 Teaching Release Time

Teaching release time will only be considered if approved by Chair/Dean and must be adequately justified within the application.

12.4	Funds for Travel Requests for travel funds to attend conferences will not be accepted.