



Immersive Hybrid Reality Lab Research

Pilot Grant Call for Applications



The Immersive Hybrid Reality Lab (IHRL), established with major support from the National Science Foundation and UMBC, has secured additional support from the Next Century Corporation to facilitate innovative, interdisciplinary virtual reality research through pilot grants to facilitate research and students. Funds are also available to bring speakers to campus. These funding opportunities are described below.

IHRL Pilot Grants for early-stage innovative research funds

IHRL Pilot Grants for early-stage innovative research are solicited for one year duration and typically range between \$2,500 to \$7,500. Awards will be made based on peer review of a proposal.

IHRL Pilot Grants will provide support for interdisciplinary virtual reality in its broadest definition, including topics such as immersive analytics of streaming security data, large biological pathways, network, and other complex datasets, visual perception, learning / education data analytics, computational models and artificial systems, large analytics, human-in-the-loop deep learning, and cognitive reasoning. The goal is to seed and facilitate innovative research projects that might not otherwise be carried out because they are perceived to be too risky or outside the goals of more traditional research grants. Collaborations with faculty not presently members of the Immersive Hybrid Reality Lab are invited. Interdisciplinary proposals are encouraged.

The projects supported by the IHRL Pilot Grants must aim to generate primary data that will form the foundation for a future research grant proposal. Pilot Grant funds can be used for non-faculty salaries and send undergraduates and graduate students to a specialized course or meeting. Grants cannot be used for technician support.

The proposal (up to 3 pages including budget) should include the following:

- *Project title*
- *Executive Summary (1/2 page)*
- *Project Description of the virtual reality research to be conducted including plans to submit an external grant proposal based on the pilot project's result (1 – 1.5 pages)*
- *A one-paragraph description to describe its relationships to NSF's Expeditions in Computing initiative (https://www.nsf.gov/news/news_summ.jsp?cntn_id=128886).*
- *List of participating faculty researchers and departmental affiliations*
- *Itemized Budget (1/2 page)*

Please the proposal as a single pdf to Dr. Don Engel (donengel@umbc.edu) and Dr. Jian Chen (jjchen@umbc.edu). Please use the subject line "IHRL Pilot Grants 2017."

Applications will be accepted on a rolling basis and will be reviewed after the following deadlines:

Submission deadline: Friday, May 19, 2017 (notification: June 1, 2017)

Friday, August 18, 2017 (notification: September 1, 2017)

Friday, November 17, 2017 (notification: December 1, 2017)

Friday, February 16, 2018 (notification: March 1, 2018)

Annually thereafter for three years.

Anticipated total funding amount: \$20,000 per year.

IHRL Grants for visiting speakers

Funds are available to bring immersive analytics and virtual reality scientists and experts to campus. Requests should include a description of the speaker's research and how a visit would benefit the immersive analytics and virtual reality research at UMBC for one or more particular labs. Up to \$1,200 (including up to \$500 honorarium) per speaker is allowed.

Nominations are accepted on a rolling basis and should be sent electronically (in PDF format) to Dr. Don Engel (donengel@umbc.edu), and Dr. Jian Chen (jjchen@umbc.edu). Please use the subject line "IHRL Grants for Speakers 2017."

Anticipated total budget amount: Up to \$10,000 per year.

Other terms and conditions

The Research Assistant trained through the grant will be named the “IHRL Research Czar of 2017” for the Immersive Hybrid Reality Lab. The core graphics/visualization faculty will work with the funded team to advise on designs that maximize reuse and the design of immersive techniques that will lead to publishable results, innovative technologies, and external funds.

The Awardee (Principal Investigator) must obtain appropriate approval (or an exemption) for any project involving humans or animals from the Institutional Review Board or the Institutional Animal Care and Use Committee, as applicable, prior to commencing work. Additionally, should the project involve hazardous substances, an Assurance on Hazardous Substances Form must be completed. Funds cannot be released until such approvals (or exemptions) are obtained.

Awardees are expected to submit at least one proposal to external agencies or sponsors within 12 months after the start of the IHRL Pilot Grant, in order to seek a continued funding for future work.

Within 30 days of completing the awarded IHRL Pilot Grant project, awardees must submit a preliminary report describing the outcomes of the project as by using the Pilot Grant Award Preliminary Report Form. Within 12 months of completing the IHRL Pilot Grant project, awardees must submit a final report specifying the proposals submitted to external agencies and any resulting awards as a result of the awarded project and any other scholarly accomplishments associated with the support (e.g., publications, exhibits, conferences, etc.) as required by the Award Final Report Form.

The reports should be submitted using the forms for reporting found on the UMBC Research website, following the directions therein.