

Holden Comprehensive Cancer Center Iowa Initiative for Artificial Intelligence/Machine Learning (AI/ML) Funding Opportunity

The HCCC is seeking proposals for cancer research projects that require Artificial Intelligence/Machine Learning (AI/ML) expertise and dedicated AI/ML computational resources. The funds will not be provided directly to the investigator. Instead, they will be provided to the Iowa Initiative for Artificial Intelligence (IIAI, www.iiai.uiowa.edu) to directly support the selected research projects. Selected projects may be new projects or AI/ML expansions of existing funded research projects.

The potential use of AI/ML in cancer research includes data driven basic, clinical and population research. This HCCC call for proposals is designed to facilitate development of new and enhance existing interdisciplinary collaborations in cancer research that can benefit from novel aspects enabled by incorporating AI and machine learning.

Responsive proposals will address important questions in cancer research using data-driven approaches, be based on access to sufficient data to answer (or start answering) such questions, seek AI/ML expertise as an enabling strategy and be willing to invest effort in building a new interdisciplinary team with this HCCC/IIAI pilot project serving as an enabling mechanism. Research projects that are not currently supported by external peer-reviewed funding should include realistic plans for preparing and submitting a large (R01 or similar sized) extramurally-funded cancer research proposal within 12 months after receiving pilot funding.

Budgets for individual projects of up to \$15,000 will be considered. It is anticipated that up to 3 awards will be made for a total of up to \$45,000 during this round.

Applicants are required to review concepts with M. Sonka (milan-sonka@uiowa.edu), Director of IIAI, and obtain his input and sign-off, prior to application. An internal peer-review committee will be identified to review proposals and make recommendations concerning funding of submitted proposals to HCCC leadership.

Please submit a 1-2 page Letter of Interest addressing the following:

- 1) Project Title
- 2) Investigators
- 3) Specific aims + Statement of Cancer Relevance
 - a. Include a brief, conceptual description of the predictor or input variables (X) and the response or outcome variables (Y)
 - b. describe available data and available data sizes to facilitate the proposed research
- 4) Current support for the project (If any)
- 5) Description of needs to obtain/use IIAI services (expertise, computational resources)

- 6) Specifics on how involvement of the IIAI expertise/use of computational resources will advance the research
- 7) Plans to receive extramural funding

Letter of Interest should be accompanied by a brief letter of support from Dr. Sonka stating his enthusiasm for the project and appropriateness of the science.

Timeline:

- 11/1/2019
 - Email a brief statement of intent to M. Sonka (milan-sonka@uiowa.edu)
 - This email should include a draft document briefly outlining items 1, 3, 5 of the Letter of Interest above
- 11/2 – 11/30/2019
 - Scheduled meetings of each team with IIAI to discuss the proposed research
- 12/20/2019 Proposal submission
- 1/5/2020 – 1/24/2020
 - Internal review of proposals, recommendation to HCCC leadership
- 1/28/2020
 - Selection of projects to be funded by HCCC leadership
- 1/31/2020
 - Announcement of up to 2 projects to be funded