The following request was submitted as an IT Project / Purchase Request to the ITMC Technical Review Team.

Request #: ITMC-1-1421276758000

Submission Date: 01/14/2015

Primary requestor: Dr. Christie Drew

Additional requestor(s): N/A

Requestor's division: DERT

Project/Purchase Title: (Example based on an FY14 Request) High Impacts Tracking System Maintenance and Upgrades

Project/Purchase Description: The High Impacts Tracking System (HITS) is a custom web-based application that allows DERT staff to proactively record grantee research outcomes and impacts. The program automatically extracts the text of progress reports and program officer notes from IMPAC II, which enables users to search for important findings and impacts. The system also allows staff to annotate grants qualitatively with specific scientific impacts or key identifiers that can be tracked over time. For the first time, we have created a permanent database that allows us to dynamically identify and track research outcomes, such as: key findings, biomarkers, models, collaborations, policies and regulations, patents, and other public health impacts. Additionally, the system can be used to quickly gather data for draft responses for Congressional, FOIA, and other inquiries. This is the first system of its kind at NIH. A description of it has been published in the journal Research Evaluation, and has generated interest among other ICs. Initially, DERT used funds from the American Recovery Act (2009) to create this system. Progress was made in the summer of 2013 but much work remains to be done to bring the system to a reasonable level of performance/function. Additional modifications are needed immediately. Of critical concern are: 1) A new Progress Report (RPPR) has been created by eRA to comply with federal-wide annual progress report requirements. The new format collects and structures annual progress report data differently. We need to ensure that HITS can work with this new form; 2) Several known bugs exist related to the data import processes - these need to be fixed. 3) HITS needs to link to the DERT grants coding data system (GCDS); 4) Improvements to reports using the Cognos platform are needed; 5) Requirements documentation and help files.

Why is this project important: HITS is an integral component of the DERT knowledge management implementation plan (KM theme and Goal 7 from the Strategic Plan). HITS provides structured long term outcome data about grants; thereby allowing us to monitor and report on grantee successes in a more systematic way. For several years, DERT has been using a logic model framework to describe the inputs, activities, outputs and impacts associated with our grants. We have a big picture logic model for the entire division, as well as logic models for

specific programs and portfolios. The tagging structure in HITS corresponds to the different "boxes" in the logic model; allowing us to organize, and report data more systematically, thereby helping us to identify gaps in research or knowledge and redirect program efforts in those areas. Additionally HITS helps us answer questions about the portfolio progress. Senior leadership frequently makes requests for information about highlights and successes in our portfolio. HITS will help us track, store and retrieve this information and increase our ability to be responsive to NIEHS and NIH requests for this data. HITS also tracks how project findings are disseminated (via the web, in the Congressional Justification, in ARRA reports, etc.) No other ICOs have anything resembling this kind of tool. It will provide stronger, systematic evidence for programmatic accountability, as well as the ability to compile data proactively rather than wait for specific questions to arrive. The project is urgent because we are no longer confident that the right information is being appropriately imported into the system and because the progress report infrastructure has changed since we created the import process. Modest investments (~350K) are expected to make major progress on some of the key vulnerabilities and issues with the current system. It is difficult to quantify the impact of the system for DERT. It is unique in the NIH complex. We currently do not have a way to systematically collect and store information about the products and impacts of our grants. This system provides a systematic approach that is highly flexible and dynamic. The system fits within the IT strategy because it aims to fill a critical need for DERT, it uses a well supported and used database (oracle), reporting tool (COGNOS).

Technical nature of the request: Any other request

When do you need this completed by: 09/30/2015

Please explain the completion date: This request is for completion in FY15. The system will require multiple years of maintenance. Additional development is expected in out years - since it is novel territory, it is difficult to estimate at this point what the long term investment will be. One of our goals for FY15 is to create an FY16-17 business/investment plan for the tool.

Will benefits extend outside NIEHS: Yes

Please list outside outside users and groups: Other ICs (NIAID, e.g.) have expressed interest. Currently no users outside NIEHS have access to the system, however.

List of NIEHS staff served by this request: All of DERT, OCPL, OPPE, OD

Will this involve collecting or displaying personally identifiable information (PII): No

Please provide the IRB#, if applicable: N/A

Have you gathered any cost information: Yes

Please upload any supporting data: N/A

Provide any additional background information: Please see attached file: HITS research eval paper.pdf