

CANARY FOUNDATION BIOINFORMATICS PLATFORM DISSEMINATION AWARDS

This award mechanism continues the support by the Canary Foundation to develop and extend the Computational Proteomics Analysis System (CPAS) as a standardized de-facto system for the dissemination of novel academic analysis tools into the research community. CPAS is a free, open source, web-based proteomics bio-informatics platform created initially for integrating proteomic analysis tools and for mining of mass spectrometry data (see cpas.fhcrc.org). More recently the broad research community is now extending the platform to allow data sharing in multiple scientific disciplines, including proteomics and vaccine discovery, and multiple data types, including mass spectrometry and flow cytometry. Presently CPAS includes support for a wide variety of open-source proteomics analysis tools including search engines (X!Tandem), the Trans proteomic pipeline (Institute for Systems Biology) and the use of open and highly standardized data formats. More recent developments include the ability to support additional search engines, including Mascot and Sequest.

AWARDS:

Previous awards from the Canary Foundation supported installation software, documentation, and development of software infrastructure for supporting high throughput enterprise use of the system. The Canary Foundation is now offering a total of \$225,000 in two award mechanisms to help disseminate and extend CPAS.

Installation Award: A total of ten awards of \$10,000 each to support adoption in a local facility, including:

- Configuration of CPAS to work with a local and perhaps pre-existing cluster.
- Training new users and troubleshooting support.
- Small customizations of CPAS for local analysis needs.

Development Award: A total of five awards of \$25,000 each to support the installation and extension of CPAS including:

- Configuration and installation of CPAS at a local facility.
- Integration of new methodologies or capacity into the CPAS distribution.
- Development of local expertise to become active developers on CPAS or related platforms.

MECHANISM:

Each award is intended to support the adoption and customization of CPAS. In most instances it is expected that awards will be used for professional installation and development support services (e.g., from Labkey Software, labkey.com). Other allowable charges include purchasing of computers needed to install and operate CPAS, and other costs associated with adoption. It is not expected that awards will be used to cover personnel costs at the local facility.

REQUIREMENTS OF AWARD:

All extensions and advancements resulting from this award must be deposited and disseminated (not exclusively) through labkey.org, a non-profit foundation managing the distribution and source code of the proteomic system (CPAS). Recipients of developer awards, or their representatives, must participate in monthly conference calls to manage and communicate developer priorities.

APPLICATION INSTRUCTIONS:

All applicants should provide a three-page maximum application and should include the following sections:

- 1. Contact persons, including Principle Investigator and lead computational contact.
- 2. A statement of targeted award mechanism (Installation Award or Development Award).
- **3.** A description of the local proteomics methodologies and capacity that will use CPAS (e.g., instrumentation and breadth of experimental expertise and methods).
- **4.** A description of the current computing infrastructure of the laboratory or institute into which CPAS will be installed (e.g., clusters, servers, and search engine, if any).
- **5.** A description of the local computational (IT and Bioinformatics) support and expertise available to the laboratories.
- 6. The proposed use of the award if funded (e.g., installation support, training, computers, etc).

Development awards should also provide:

- **7.** A description of the novel informatics capacity that would added to the CPAS distribution if funded.
- 8. A statement regarding the software engineering expertise at the local laboratory.

No detailed budgets are necessary.

REVIEW CRITERIA:

Installation awards will be evaluated based on the capacity of the current CPAS 2.0 release to process the laboratory workflow, and the availability of appropriate IT and bioinformatics support at the laboratory.

Development awards will be evaluated on the value that the CPAS extensions add to the mission of tool and data dissemination and sharing, and whether or not the laboratories have appropriate software engineering personnel to actively participate, following training and support, in the development team.

REVIEW TEAM:

The review process will be lead by Martin McIntosh (Fred Hutchinson Cancer Research Center) and Don Listwin (Canary Foundation), with input from ad-hoc reviewers as needed.

FUNDING DATES:

Applications received by May 7, 2007 will be considered for the first round of funding. Expected award dates: May 15, 2007 and June 15, 2007, (if funds remain).

APPLICATION SUBMISSION:

All applications should be sent by email to Sarah Hawley (sarah@canaryfoundation.org).

ADDITIONAL INFORMATION:

Specific information about CPAS capabilities may be found at the support site (see cpas.fhcrc.org). For more information about the Canary Foundation visit canaryfoundation.org.

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