

Triton Research Opportunities: A program to encourage collaboration

- **Objective:**
 - Seed funding to develop collaborative extramural proposals between SDSC and UCSD researchers that leverage/exploit Triton Resource (tritonresource.sdsc.edu)
- **The program:**
 - A proposal competition for 10% of Triton cycles
 - Total \$200K/yr budget. To be spent inside SDSC for fractional FTEs working on projects/proposals
 - Two competitions / year (\$100K each)

Proposal Requirements

- **Eligibility: Proposal should be co-led by a UCSD faculty/researcher and an SDSC PI.**
- **There is a limit of 2 TRO proposals per year per SDSC PI.**
 - A PI may make a petition to the PAC requesting a waiver of this restriction
- **Proposal Format:**
 - 1-page **Project Summary**, including Project Title and Name/Dept of lead PIs
 - Upto 5 pages **Project Description**. Must include:
 1. Problem statement and intellectual merit
 2. Description of how Triton Resource will be used, and how much of the resource is needed, and in which mode (e.g. single dedicated run, multiple runs, batch, online, etc). This program will have access to a maximum of 10% of the Triton Resource, i.e. around 2 million core hours. Typically, an individual request is not expected to exceed around 1%, i.e. 200,000 core hours. Each request will also be provided a maximum of around 10TB of disk space.
 3. Description of how results will lead to a follow-on proposal effort (specify the agency/ies and RFP(s) that will be targeted
 4. Budget: i.e. how funds will be spent at SDSC (essential travel may be covered, if justified, but will be restricted to \$400).
 5. Include 2-page NSF-style CV for each lead PI (and any co-PIs).

Schedule, Budget, Dates, Review Process, etc

- The TRO program will be offered every 6 months, with \$100K allocated for each competition (\$200K/year)
- Proposals are typically expected to be in the range of \$10K-40K each. Typical would be \$25K.
- Duration of each project is expected to be in the range of 6-9 months
- Dates: Proposal submission deadlines are July 15 and February 15 of each year.
- Review process: Proposals will be reviewed by the SDSC Project Advisory Council, chaired by Chaitan Baru. The results of this panel review, with recommendations, will be forwarded to the SDSC Chief Scientific Officer, Michael Norman, for final decision making.
- Submission process: A website will be provided for upload of the proposal. The review panel will be able to access the submitted proposals online and submit online reviews.
- Results will be announced in 4 weeks after submission deadline.

Review Criteria

- **Intellectual Merit**

- How important is the proposed activity to advancing knowledge and understanding within the field or across different fields?
- How well does it leverage the capabilities of the Triton Resource. Could the research have been performed at UCSD without the Triton Resource?
- How well qualified are the researchers?
- To what extent does the proposal explore creative, original, or potentially transformative concepts?
- How well conceived and organized is the proposed activity

Review Criteria

- **Broader Impact**

- Does the project broaden participation by involving new collaborators at UCSD
- Does the project broaden participation by involving “non-traditional” disciplines
- How feasible is the plan for extramural funding? What is the likelihood of success of proposal submitted to the given agency/program?
- Does the proposal exploit special capabilities of the Triton Resource, and extend the use of the Resource in new ways?
- What is the potential for involving students in the final proposal / project

Results

- **A successful result for a TRO project would be submission of a substantial proposal by the PIs to any funding source, based on work done in the TRO project.**
 - It is expected that SDSC will have a substantial role in such a proposal. There should be a reasonable budget component for SDSC. The full proposal or, at least the SDSC portion of it, must go through the SDSC business office. The SDSC PI and the non-SDSC PI should essentially be “co-leads” of the proposal.
- **Another successful outcome could be publication and/or press release of novel results from the TRO project**
- **Each project is required to provide a written technical report at the end of its duration. These reports will become part of an SDSC Technical Report Series.**
 - Reports should describe the problem being studied; how the Triton resource was used; and any new results
 - Reports are encouraged to include an addendum providing a description of the project’s experience in using the Triton Resource highlighting both good and bad experiences (if any). This addendum will be used to improve services offered on Triton

SDSC Project Advisory Council (PAC)

- **The primary responsibility of the SDSC PAC is to serve as the review panel for the SDSC Triton Research Opportunities program (TRO)**
- **TRO provides funding for exploratory research projects that use the Triton Resource**
 - The funding is intended to cover labor of SDSC staff
 - TRO projects are required to be co-led by a UCSD PI and an SDSC PI
 - Currently, \$200K / year have been allocated for the TRO. Individual project budgets are expected to be in the range of \$10K-\$40K. There will be two competitions per year, with \$100K allocated for each competition.
 - TRO proposals will include a 1 page Project Summary, up to 5 pages Project Description, 1 page Project Budget, and 1 page Budget Justification.
- **Membership**
 - Each member will serve for 2 years (initially members may be appointed for 1, 2, and 3 years to initiate the program)
 - PAC membership will reflect a broad range of disciplines, echoing the diversity of disciplines at UCSD and also SDSC's desire to support applications across a diverse set of disciplines.
 - The PAC membership will be sufficiently large to keep the review workload reasonable.

Website / Resources

- **A website will be established for information on TRO, and for submission as well as review of proposals**
- **The website will provide resources related to the TRO including:**
 - This set of slides
 - An architecture diagram showing major components of the Triton Resource
 - A list of SDSC PI's, with their expertise and areas of interest
 - A list of research areas and topics of interest to TRO and SDSC