

Call for Proposals

College High-Impact Research Program

College of Physical and Mathematical Sciences

Due 30 September Each Year

CHIRP was established to fund research projects that have the potential for high impact. Since the ongoing viability of CHIRP relies on royalty income, about half of CHIRP funds will go to projects that have significant royalty potential. The following considerations will be used in assessing CHIRP proposals.

1. The anticipated end-result of the project must be of clearly higher impact than most research projects.
2. CHIRP funding must be enabling — the proposal must explain why there is simply no other reasonable way for the proposed research to be accomplished.
3. Research initiation to address significant problems of current strategic value, and that demonstrate likelihood of future external funding, are appropriate for CHIRP. Cross disciplinary proposals are particularly encouraged.
4. For projects that do not have royalty potential, publication of the results in a top-tier venue is necessary but not sufficient for CHIRP funding. The research should show promise to move the discipline ahead in a major way and should be capable of receiving very strong external reviews from an appropriate funding agency such as NSF.
5. For projects that are targeted at generating royalty, the potential return on investment to the college should be at least 10 times the amount of the CHIRP grant. For example, if the CHIRP grant is \$40,000 the proposal should make a compelling argument that, in time, the college can expect at least \$400,000 in royalties. The research should also have intellectual merit that, if successful, will result in top tier publication.
6. Significant recent college funding to a PI will increase the threshold for a successful CHIRP proposal. Such funding includes prior CHIRP awards, professional development leave funds beyond salary, matching funds for research proposals, etc. New faculty who have unspent startup funds are unlikely to be successful with a CHIRP proposal.

The amount of each CHIRP grant will generally be in the \$10,000—\$40,000 range. Proposals that have been submitted to external agencies can be submitted to the CHIRP, although the format and content would likely need revision and the funding amount will likely be less. For example, if the research is time critical and shows exceptional promise of high impact, CHIRP funding could be used to get a jump on the research while waiting for the external funding to commence. In such a case, the PI may be asked to return unused CHIRP funds when the external grant issues. Another

example is if a proposal to an external agency is rejected because it is too risky or too preliminary, but it receives very high reviews.

Proposals that have *not* been submitted to external agencies should explain why they have not. Possible reasons are that the research is too preliminary, too risky, that it involves an interdisciplinary team that does not fit into funding agency classifications, or that it is too close to commercialization.

Submission Deadline: Proposals are due 30 September. Email one electronic copy to your chair, and one to Tom Sederberg (tom@byu.edu). Chairs should rank the proposals from their department and submit their rankings to Tom Sederberg by 7 October. The college is not bound by the department ranking.

Exceptional CHIRP proposals will also be considered at any time throughout the year, although successful proposals submitted at a date other than the 30 September review cycle must meet a significantly higher threshold than those submitted by 30 September — and that threshold is already high. Before going to the effort of writing a CHIRP proposal you are welcome to discuss your proposal idea with Tom Sederberg.

Use of Funds: Student wages (but *not* faculty salary), supplies, travel, equipment.

Targeted Notification Date: 1 November

Funding Period: Funding can start as early as 1 November or as late as the following summer. CHIRP funds that are not expended within a year of the start date will usually be taken back by the college.

Proposal Format

1-2 page Executive summary written to a general scientific audience. This summary should overview the project and its potential impact, and estimate the likelihood of success. Most CHIRP proposals should be viewed as a springboard to external funding or royalties. Explain in detail how this will happen. Indicate if you are planning to submit a MEG or Tech Transfer proposal on the same or a related topic. Parallel submission is fine, but the likelihood of full funding from two internal sources for the same project is very small.

1 page Detailed budget and budget justification. Explain why you cannot pay for your proposed project with existing funding. The budget should be in the \$10,000 — \$40,000 range.

1 page PI qualifications

≤ 8 pages Project description

1 page Detailed plan for leveraging CHIRP funding to establish a long-term impact. In most cases, this means either commercialization plans or plans for securing external funds. If your proposal is aimed at commercialization, provide an estimate of the royalty potential (including market size and competition) and discuss your project with the Office of Technology Transfer, as we will ask them for their recommendation. If your proposal is a springboard for external

funding, explain why the potential impact of your topic is clearly above average, and why an external proposal is not currently feasible.

Proposals that cannot be understood by a scientific audience of non-specialists will not be successful. Since it is highly unlikely that any given department would receive more than three CHIRP grants, you should check with your chair before writing a proposal to get a sense of whether he would rank your proposal in the top three.

Final Report

A two-page final report must be submitted to the college within two months after a CHIRP-funded project completes. This report must describe what was accomplished relative to what was proposed, including such items as what was accomplished, how the funds were spent, student participation, and external proposals or commercialization efforts, as appropriate. Failure to make diligent efforts to seek external funding or commercialization (when appropriate) may eliminate the PI from consideration of future CHIRP funding.

Selection Process

The proposals from each department will be evaluated and prioritized by the chair. These proposals will be read by the dean and associate deans, who may additionally schedule a face-to-face meeting with some PIs or seek external reviews. Proposals with royalty potential will also be reviewed by the Office of Technology Transfer.