Center for Clinical and Translational Science and Training (CCTST)
2019 Design Thinking Research Awards
Grant Application Instructions

<table>
<thead>
<tr>
<th>SPRING SEM DEADLINES</th>
<th>SUMMER SEM DEADLINES</th>
<th>FALL SEMESTER DEADLINES</th>
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<tbody>
<tr>
<td>Invitation to apply:</td>
<td>10/29/2018</td>
<td>2/15/2019</td>
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<td>Final Application:</td>
<td>11/19/2018</td>
<td>3/15/2019</td>
</tr>
<tr>
<td>Project Date:</td>
<td>1/14 - 5/03/2019</td>
<td>5/13 - 8/16/19</td>
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1. Background and Purpose
   Established in 2005, the CCTST is a collaborative effort among the University of Cincinnati (UC), Cincinnati Children’s Hospital Medical Center (CCHMC), UC Health and the Cincinnati Department of Veterans Affairs Medical Center (VAMC). The CCTST is a research resource and “academic home” for clinical and translational scientists and programs, which in collaboration with the Live Well Collaborative (LWC) is sponsoring this grant opportunity. The LWC is a non-profit founded in 2007 by UC and Procter and Gamble (P&G). Its purpose is to specialize in research and development of products and services for Living Well across the lifespan, with an emphasis on America’s aging population. It is built around the open innovation model for moving translational research into the market place.

   This grant opportunity provides partial support for a Studio project. Your team identifies a healthcare challenge and the LWC works with UC to form a design led team (comprised of both faculty and students). The team will utilize design thinking tools and a “co-creation” model with stakeholders (e.g. patients, parents, clinicians) to develop innovative products or services to address the healthcare challenge. The Studio structure facilitates development of ideas that are actionable and implementable. Your team walks away with experience in human centered design methodology that can be used to address future challenges and sustainable tools/prototypes that are ready for testing and iteration. The collaborative has a track record of completing 70 studio projects that have involved over 600 students and more than 40 UC faculty members.

2. Definitions
   **Design thinking** is a problem solving methodology grounded in a deep understanding of the needs and challenges, as well as the goals and aspirations, of the person or group that solutions are being designed for. On-going iteration and co-creation of solutions to ensure they are meeting intended objectives is a key part of the process.

   Herbert Simon, Carnegie Mellon Professor and one of the most influential social scientists of the 20th century, defines design thinking as, “Devising courses of action aimed at changing existing situations into preferred ones.”

   **Studios** are a semester (14-16 weeks) in duration and the purpose is to develop a new product or service prototype. All intellectual property developed during the project becomes the property of the project sponsor (CCHMC team).

   **Prototypes** are initial samples/models of a product or service built to test a concept or a process.
3. Eligibility
Applications will be accepted from faculty/staff of Cincinnati Children’s Hospital Medical Center (CCHMC). Faculty/staff based at UC and VAMC can collaborate with CCHMC investigators and this is encouraged; however, the PI must be from CCHMC. Multidisciplinary teams are strongly encouraged. Applicants must be CCTST members. To join free of charge, go to http://cctst.uc.edu/user/register.

4. Annual Award Limit
Applicants may only receive one award per calendar year.

5. Grants Available
Studios for services/product development: Grants provide an academic semester (14-16 weeks) of support. The maximum allowable grant is $10,000 for the 14-16 weeks. Historically, studios have ranged in cost from $29,000 to $78,000 depending on staffing levels of faculty, graduate, and co-op students and supplies needed to complete deliverables (i.e. costs will be driven by project complexity and scope). The final cost for the applicant’s studio will be mutually agreed upon by your team and LWC depending on the specific nature of the challenge. The applicant’s Division must agree to cost-share the remainder of the studio or the applicant can use grant funds for the remaining costs. The number of awardees will be determined by the quality of the proposals and available funds. Approximately 1 award will be available each semester in 2018: spring (1/8-4/26), summer (5/7-8/3) and fall (8/20-12/7).

6. Process
The initial application for research proposals will consist of a 2 page Letter of Intent (LOI). The LOI will be screened for eligibility and to examine if the proposed research/quality improvement project supports the goals of CCTST Design Thinking Research Awards. The LOIs will be screened by an advisory committee consisting of LWC, CCTST and CCHMC members. Following the initial screening, selected investigators will be invited to submit a full application. There will be 3 opportunities annually for LOIs that will coincide with the semester schedule. The LOI submission dates will be posted on the CCTST website at https://cctst.uc.edu/funding/designtinking.

7. Letter of Intent (LOI)
The LOI consists of the application face page (form attached) and 2 pages consisting of the following:

- background and rationale
- project aims
- desired outcomes
- brief description of how the project aligns with CCHMC strategic priorities
- funding opportunities to be pursued
- sustainability plan
- key collaborators and their department/divisional affiliation

Instructors and assistant professors must also provide a letter of support from their research mentor. Non-faculty staff members must also provide a letter of support from their director.

LOIs must be submitted in single spaced text, one-half inch margins, and no smaller than an 11-point font. Arial or Helvetica typeface is required. The primary applicant’s name must appear in the upper right hand corner of each page after the face page. LOIs will be due by 5 p.m. on the deadline date. Submit as a.pdf file to Aimee.Lemond@cchmc.org.
6. **Composition of Research Proposal**

Applicants whose LOIs are selected for a full research proposal will be notified approximately one month after the LOI submission date. Full application research proposals must be submitted electronically and will be due by 5 PM on the deadline date. Send full application proposal as a .pdf file to the email addresses listed below.

**Email subject line: CCTST Design Thinking Award**

TO:  
Aimee.Lemond@cchmc.org  
Lori.Crosby@cchmc.org  
James.Heubi@cchmc.org  
ldunseath@livewellcollaborative.org

Invited applications must be submitted in single-spaced text, one-half inch margins, and no smaller than an 11-point font. Arial or Helvetica typeface is required. The primary applicant’s name must appear in the upper right hand corner of each page after the face page. **Proposal text is limited to three pages.**

Invited research proposals should include:

1. Face Page – Key Co-investigators should be listed (form attached below)
2. Abstract (not to exceed ½ page)
3. Documentation of Division cost-share or grant funds to fund the remainder of the project ($19,000 – $68,000). The Collaborative can advise of project costs once deliverables are identified.
4. Letter of Support from division chief or department chair, research mentor (if applicable) and director (if applicable)
5. Project Brief (limit 3 pages)  
   a. Brief overview of project goals, outcomes and what it will lead to (could be a Specific Aims page) – limit one page  
   b. Significance  
   c. Innovation  
   d. Approach (description of the setting/clinic and target population, existing resources/support that will promote project feasibility, description of multidisciplinary team members).  
   e. Preliminary studies, if any  
   f. Project timeline  
   g. Literature Cited (can be outside of the 3 page limit)
6. Statement about how this project fits within the mentoring/research environment.
7. Statement about how this project aligns with CCHMC strategic priorities.
8. Specific expected deliverables (manuscripts, future grant applications, clinical process changes, clinical care delivery tools).

7. **Letters of support and required signatures**

*Full application research proposals must include a letter of support from the primary applicant’s division chief or chairperson and research mentor if applicable. Non-faculty staff members must provide a letter of support from their director.* Included in the letter of support must be a statement regarding the priority of the research proposal. Instructors and assistant professors must also provide a letter of support from their research mentor. Please address letters of support to the CCTST Design Thinking Research Awards Committee.

8. **Design Thinking Research Awardee Activities**
An overarching goal of the grants mechanism is to foster a community of researchers focused on cutting-edge design thinking research through the CCTST. Such a research community will have ties that cut across divisions and programs that currently conduct innovation research. To this end, awardees will participate in activities and network building to enhance the CCTST research community such as: 1) attending CCTST Grand Rounds, 2) attending quarterly CCTST Internal Advisory Committee Meetings, 3) being available for consultation with future applicants for the Award, and 4) co-authoring/disseminating results of the work at conferences or via manuscripts in peer-reviewed journals and patient publications.

The application review committee from the LWC and CCTST will conduct a review of each full grant proposal. Proposals will be evaluated using guidelines similar to those of other CCHMC internal awards and NIH awards. These include the proposal’s significance, alignment with CCHMC strategic priorities, investigator qualifications, innovation, approach, mentoring/research environment, overall impact, and sustainability. Projects addressing one of the CCTST priority areas are strongly desired. In all cases, an early impact on patient/family experience, health care quality or health outcomes will be viewed very positively. Applications that will lead to R level funding, Place Outcomes Awards or supplement research project funding for career development awards will be viewed favorably.

10. Notification of Award
Applicants will be notified of decisions about grant awards at least 2 months before the beginning of the semester to ensure that adequate time is available to start the project and complete it within the time frame of the semester or summer session. Awardees will be required to sign a contractual agreement with the LWC that outlines the project deliverables and funding requirements.

11. Progress Reports
Awardees will be required to provide a summary report of the grant 8 weeks after completion of the award period. This summary should include a description of the aims of the award, the progress toward completion of aims, the problems encountered and how they were overcome, progress toward implementation of the sustainability plan and any plans to pursue extramural grants using data from the award as preliminary results. Follow-up summary reports will also be required at 6 months and 12 months after completion of the award period.

For additional information about the Live Well Collaborative, go to www.livewellcollaborative.org.

For additional information about the CCTST Design Thinking Research Awards, please go to http://cctst.uc.edu/funding/designtthinking or contact Aimee.Lemond@echmc.org
### 1. TITLE OF PROJECT

**CCTST Design Thinking Research Award Proposal**

**Research Grant Application Face Page**

### 2. PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR

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<th>2a. NAME (Last, first, middle)</th>
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<td>2c. POSITION TITLE</td>
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### 3. Co-PRINCIPAL INVESTIGATOR/PROGRAM DIRECTOR

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### 4. Human Subjects Research

- Exempt
- Yes
- No

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<td>4b. IRB Approved</td>
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<td>4c. If yes, IRB #</td>
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### 5. DATES OF PROPOSED PERIOD OF SUPPORT (MM/DD/YY)

From ___ To ___

### 6. COSTS REQUESTED Year 1

- Direct Costs ($)

### 7. COSTS REQUESTED Total

- Direct Costs ($)

### 8. The undersigned reviewed this application for a CCTST Design Thinking Research Award and are familiar with the policies, terms, and conditions of the CCTST concerning research support and accept the obligation to comply with all such policies, terms, and conditions.

**Primary Applicant:**

**Signature of Primary Applicant**

**Date:**

**Division Chief or Dept. Chair of Co-investigator:**

**Co-investigator applicant:**

**Signature of Co-Investigator Applicant**

**Date:**

**Division Chief or Dept. Chair of Co-investigator:**

**Signature of Division Chief of Co-investigator**

**Date:**

**Co-investigator applicant:**

**Signature of Co-Investigator Applicant**

**Date:**

**Division Chief or Dept. Chair of Co-investigator:**

**Signature of Division Chief of Co-investigator**

**Date:**