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THE CENTER FOR HEALTH DESIGN RESEARCH COALITION

2018 NEW INVESTIGATOR AWARD

Submission Deadline: September 21, 2018

The Center for Health Design's Research Coalition announces the New Investigator Award (NIA). Its purpose is to support high quality research by new investigators around the world in the field of evidence-based healthcare facility design. The award is open to graduate students, and other recent research degree recipients whose contributions reflect their potential to conduct original, empirical research to improve our understanding of the relationships between the physical environment and health-related outcomes & wellness. The goal of the award is to support new researchers whose research is likely to fill critical gaps in the field of evidence-based design (EBD).

All applications will undergo a thorough peer-review process, conducted by The Center's Research Coalition (RC) members. All applicants must use the provided (approved) templates with no modifications to fonts (e.g., type, size) or formatting (e.g., line spacing, margins). Modifications to footer page numbers are expected prior to assembling your final submission. Your should be clear and succinct. In no instance shall the "body" of the proposal exceed the allowed page limits. (See the application requirements, page 5.) The Research Coalition reserves the right to disqualify/reject submissions that exceed these limits. You are responsible to check your submission. You will not be notified about disqualification in advance of the deadline.

AREAS OF FOCUS

This request for proposals (RFP) seeks to fund studies in all healthcare settings, including hospitals, ambulatory care, behavioral health settings, senior living facilities and home-based models of care. The setting of research can range from academic medical centers to community based care initiatives, as well as simulation laboratories.

This RFP stipulates that the proposal examine the relationship between the built environment and healthcare outcomes for the following areas of focus:

1. Patient, resident, or staff
   a. Safety
   b. Experience and/or satisfaction
   c. Health & wellness
2. Population health management (defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group"). In the context of the built environment, we broadly seek to address how healthcare organizations use design of the built environment (hospitals or ambulatory care facilities) to support patient activation/engagement and related measurable outcomes.
3. Design to support behavioral health in a variety of settings (i.e., not limited to secure psychiatric units). We acknowledge the broad spectrum that encompasses behavioral health and the proposal must specify both which segment of the behavioral health population is to be considered and which environments are proposed for study.
4. Impact of technology on built environment design and how these innovations improve healthcare outcomes, organizational outcomes, and/or communication in formal healthcare settings (e.g., hospitals, ambulatory care centers) or the home. To be eligible, the focus of the study must directly relate to the

impact of technology on a tangible design aspect of the built environment, not just the use of technology to improve access to care or use of technology in a space.

5. The development of innovative tools, techniques, and approaches to support healthcare design research.

RESEARCH COALITION PURPOSE

The purpose of The Center for Health Design's RC is to support EBD research and its translation into practice that contributes to therapeutic, safe, efficient, and effective healthcare environments. The RC directly supports The Center's strategic goals by:

- Assisting with the translation of research into practical design tools.
- Facilitating the engagement of new researchers in the EBD community.
- Strengthening knowledge of new research endeavors.

AWARD

The Center for Health Design will present one award of $10,000 to a researcher in the early phase of their research career. Additionally, the award recipient will receive free registration to attend the Healthcare Design Expo & Conference, where they will have the opportunity to present their completed study; travel and lodging expense will also be covered by The Center. The award recipient will be designated a member of The Center's Research Coalition for one year.

EVIDENCE-BASED DESIGN OVERVIEW AND SUMMARY

Evidence-based design or '*the process of basing decisions about the built environment on credible research to achieve the best possible outcomes*' provides a framework for linking facility design decisions with key patient, staff and organizational outcomes in healthcare settings.

While the body of evidence available for supporting design decisions has grown over the last decade, there is still a paucity of research in many key areas. As a result, healthcare practitioners and designers engaged in the design of new facilities or renovating existing facilities struggle to find sufficient evidence to support key facility investment decisions. There is a need for timely and relevant research studies that clearly show how different aspects of the built environment impact patient safety, worker safety and effectiveness as well as patient satisfaction and quality of care in healthcare settings. The New Investigator Award is intended to support the continued development of quality EBD research and researchers.

ELIGIBILITY

Investigators from research and academic institutions, and professional practice, are encouraged to apply. Applicants should be either a current graduate student or someone who has graduated with a research degree *within the past three years* and is currently engaged in research in either a practice setting or academic institution. Applicants may have extensive professional experience, but must be *in the early stages of their formal research career* to qualify (i.e., no more than three years following the degree year). Age is therefore not a factor in eligibility consideration.

Applicants may be involved in a research study that is part of a larger research agenda. However, if this is the case, applicant must clearly articulate how their individual study scope is identifiable as a separate "sub-project" from larger agenda. **These applicants should describe how their individual research is contributing to the body of knowledge apart from the larger research scope.** These applicants should also define how this study increases their individual skillset in the context of the larger opportunity. There should be no doubt that the applicant is the lead investigator for the study described in the application. As such, the award is not intended for a research team although the candidate may include industry

experts/academic advisors in an advisory role. It should be clear that advisors are not conducting the research.

All applicants should submit a fully developed research proposal meeting the page limits as detailed in the Application Requirements. Only the approved templates are to be used. The proposal should not be developed in design software or with a Word format using different fonts, sizes, and layouts. This is to ensure a consistency of applications for the reviewers. Deviations from the provided template and page limits are grounds for disqualification.

EVALUATION CRITERIA

Proposal submissions will be reviewed and scored by the Research Coalition members (and Research Coalition Alumni if necessary) based on the following weighted criteria (listed in order of importance):

1. Scientific quality of the proposal (including study purpose, significance, research question/hypothesis, anticipated outcomes, practical implications, literature review, conceptual or theoretical framework (optional), study design and methods)
2. Readiness (including researcher's capabilities and experience, project feasibility as described in the proposal, Human Subjects protection/Administrative approval)
3. Industry contribution (including innovation & new knowledge, dissemination plan)
4. Logistical Administrative (including budget justification, task schedule/timeframe)
5. Writing Quality (grammar, spelling, clarity, appropriate use of research terminology)

The award decisions will be made at the discretion of The Center based on the recommendations of the RC. Reviewers are required to respect the confidentiality of the information provided in the proposals. Applicants will receive written feedback from the jurors following the announcement in November 2018.

2018 NEW INVESTIGATOR INFORMATIONAL WEBINARS

Applicants for the New Investigator Award are required to view an informational webinar. The webinar will cover:

- The Center for Health Design's Research Coalition Mission and purpose of the NIA RFP
- A step-by-step discussion of each section of the proposal and what it tells the reviewers
- Keys to success and common mistakes to avoid

A question and answer session will be held on July 11, 2018 for any questions that may arise from the RFP. Click here to register for this 30-minute Q&A session. To view the recorded webinar, email Catherine Ancheta at cancheta@healthdesign.org.

APPLICATION PROCESS AND SCHEDULE

May 15, 2018	2018 NIA RFP announced
July 11, 2018	NIA RFP Q&A (webinar viewable on-demand) — 3:00-3:30pm Eastern
September 21, 2018	**Submission Deadline**
November 2018	NIA Finalists announced with Award Recipient announced at HCD18
January 1, 2019	The NIA recipient joins the Research Coalition for a one-year membership
November 2019/2020	The NIA recipient presents research findings at the HCD Conference

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NIA Award Recipient Deliverables

NIA recipient will submit quarterly progress reports to The Center and a member of the Research Coalition, who will act as a mentor. Recipients are expected to complete the research project, according to the timeline outlined in their proposal. Any adjustments to the timeline must be coordinated with and approved by the RC.

At the conclusion of the project, NIA recipients are expected to:

1. Prepare a manuscript describing the study in a format that can be submitted to a peer reviewed journal. Submission to a peer-reviewed journal is at the discretion of the researcher, but please acknowledge the support of The Center.
2. Complete a Key Point Summary of their study using The Center's Knowledge Repository format.
3. Provide a 20-minute presentation about their study during The Center's Innovations in Research session of HCD'19 or '20.
4. The researcher will coordinate with an RC mentor to write the final deliverable, which is a paper (approx. 5 pages, excluding references and appendices) that summarizes the design implications of the study. The paper should be written for an audience of designers, and will be published via The Center's website.

Reviewer Conflict of Interest

Research Coalition members, The Center staff, and consultants are not eligible to serve as principal investigators. In addition, they may not participate in the review of proposals that are submitted by his or her colleagues or if he or she is asked to serve in a consulting capacity. All proposals must adhere to the application process of the RFP. All research results will be broadly disseminated and therefore are required to be non-proprietary. Only one proposal per applicant is eligible for the award.

Applicant Conflict of Interest

Applicant must acknowledge any real, perceived, or potential COI that raises questions of research integrity (i.e., circumstances in which research may be influenced by a secondary interest of the applicant.) This includes an existing or potential financial or other material interest and/or a relationship that impairs or might appear to impair the individual's independence and objectivity in conducting the study. If there is no COI the applicant must explicitly state, "I have no conflicts of interest" in the template, in addition to indication in the application checklist.

Research Coalition Members

The current roster of Research Coalition members can be found on our website:

https://www.healthdesign.org/about/volunteers/research-coalition

Questions and proposals should be addressed to:

Catherine Ancheta, Project Manager The Center for Health Design
1850 Gateway Boulevard, Suite 1083
Concord, CA 94520
925.521.9404 x122

cancheta@healthdesign.org

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APPLICATION REQUIREMENTS

For an application to be considered complete, applicants must develop their proposal narrative by answering all questions and addressing all items listed in the Grant Proposal Template table that follows. You may expand the template boxes as needed to address each element. The outline intended to simplify the narrative development for applicants and the evaluation process for reviewers.

Component and Length	Purpose
NIA RFP Checklist (1 page)	Include a completed checklist as the first page of your proposal (included below)
Scientific Quality – 6 pages maximum, per below, including "cover"	
"Cover" Page, 1 page	Title of the Study: Title should be succinct, pertinent, and relevant to your topic.
	Principal Investigator: Name, credentials, title, place of employment Contact Information: address, email, phone number.
	Abstract, maximum 1/2 page: Describe purpose, methods, anticipated results, and relationship to the chosen issue topic.
Proposal Description, maximum of 5 pages, not including references.	*Introduction* *Background:* Brief background and overview, including citations/references. *Purpose or Aim of the Study:* Should be clearly stated within the first two pages of your proposal. *Significance:* Significance to healthcare design or healthcare is clearly expressed and well described. Make the case your study is important to the development of knowledge about the impact of built environments on healthcare, patient, provider, or organizational outcomes. Be sure to note the gap in knowledge your research will address. *Practical Implications:* Briefly describe potential impact of research results in practice. *Research Question(s)* Variables / Outcomes of interest: Appropriate to the research design, clear & measurable; be sure to indicate relevant patient, provider or organizational outcomes. If available, a theoretical framework and/or conceptual model (visual or written): Describes key factors, concepts, or variables and the presumed relationships among them. *Research Methodology:* Method section should be logically ordered and support the study's purpose/aim. Identify the research design; description of setting; sample; instruments used; and proposed method of data collection and analysis. Instrument identification/reporting. *Research Design:* Qualitative - ethnography, epistemology, historical/ philosophical, phenomenology, grounded theory, case study, focus groups, narrative inquiry, other? Quantitative: Experimental (randomized), quasi-experimental (e.g. non randomized control groups, pre/post) descriptive, correlational. Define whether cohort, cross-sectional, case control, etc. Indicate if you have conducted a power analysis to determine proposed sample size. Mixed Methods: Include the relevant data for both quantitative and qualitative portions of study and whether your design is exploratory, explanatory, convergent, or other. Explain why a mixed methods approach is most suited to your research question. *Setting:* What/How many hospitals/healthcare settings you propose to use in the study

	Proposed Population and Sample: The population you are proposing; inclusion/exclusion criteria; sampling method (random, convenience, snowball, other); Number of subjects expected in your sample. *Data Collection Procedures:* 1. How you will recruit your subjects. 2. Your data collection procedures (interview or focus group format, instruments/surveys, observation tools). *Data Analysis:* How you will analyze your data or identify themes including software used, any consultants that will be used. *Instruments (e.g., surveys, observation)*: If your instruments are self-developed or if they have been psychometrically tested (validity and reliability) with results.
Logistical/Administrative - 2 pages, per below	
Tasks & Milestones, maximum of 1 page	Tasks and milestone in a timeline. Refer to the budget template to associate requested funds with each task. You will be required to meet quarterly with a member of the CHD's RC who will act as your mentor, schedule your milestones accordingly.
Budget Narrative, maximum of 1 page (plus spreadsheet)	Completed budget template (attached in the appendix). Reference a budget narrative to explain all line items. Tie line items to project tasks and milestones. Please explain any additional funding contributions.
Readiness (Feasibility) – 2 pages, per below	
Qualifications (Researchers' Experience), maximum 1 page summary	Qualifications for the investigator in the study regarding level of research experience. If you a student, indicate the name and phone number of your faculty or research mentor/sponsor. Identify any real or possibly perceived conflict of interest. This includes an existing or potential financial or other material interest and/or a relationship that impairs or might appear to impair the individual's independence and objectivity in conducting the study. Explicitly state if there is no conflict of interest. Anticipated research trajectory. Why you are best suited for this work. (Include Curriculum Vitas(CV) and references, as appendices, as identified below.)
Feasibility, maximum 1/2 page	Any potential challenges with your project proposal. Clearly demonstrate the necessary access to and cooperation of people with whom you will need to work to collect proposed data (or clearly demonstrate access to proposed data) and disseminate your results.
Human Subjects, maximum 1/2 page	Whether or not your study involves human subjects and, if so, explain how your research methods will protect human subjects. Entity through which you will submit an IRB application.
Industry Contribution – 1 page, per below	
Innovation & New Knowledge, maximum (0.5 pages)	How your project is innovative or supports the development of new knowledge by linking to your study's aim, research questions, and significance.
Communication/Dissemination Plan (0.5 pages)	Planned publications/conference presentations
Appendices, as needed	
(Note that excessive material included in the appendices about research design and methods to circumvent page limits, solely as perceived by reviewers, will not be considered.)	1. Include CV and Contact Information for the applicant only (max 5 pages); If you feel additional CVs are warranted, you must contact the Center for Health Design for clarification prior to submission. 2. Two references; For all applicants, we recommend that you seek letters of recommendation from individuals who are well acquainted with your skills and capabilities as a researcher. 3. Signed commitment letters from organizations where you may be conducting your research study.

	4. For graduate student candidates, you should also include one letter from your thesis advisor to confirm that your study has been approved by your committee. 5. Research Instruments: If available, please attach any instruments that are developed and planned for use as an appendix item. For example: a. Demographic survey (all demographic items must have some relationship to your research question) b. Interview questions planned for use in the study c. Observation tools d. Other
Writing Quality	This is part of the evaluation. We highly recommend that you have your application proofread by someone knowledgeable in proper grammar, spelling, and appropriate use of research terminology.

BUDGET GUIDELINES

Funding for the successful applicant is defined as an award (not a grant), and should not be subject to the purview of an institution's grant office. It is the applicant's responsibility to verify institutional requirements. Payments are made to the applicant, not to an institution.

INTRODUCTION

The following guidance is provided to help you prepare the budget document that accompanies your proposal. It is organized to address each category of expense and services that may be required to complete your project. First, some general thoughts about your costs, which should be reasonable, allowable and allocable:

- The budget is the financial reflection of the project
- All costs must be necessary to achieve your project objectives.
- No university/organization overheads will be allowed within the budget. A fringe rate for employer contributions such as health plans, insurance plans, social security, etc. of up to 10% is allowed.
- Your proposal will be evaluated on whether the budget is reasonable for the work proposed
- The success of the proposal may hinge on the reasonableness of the budget
- Your proposal may be judged more favorably if you procure matching funds.
- If you are granted the award money, you will need to get approval from the Center for Health Design project manager assigned to you if you need to deviate from the approved budget.

1. PERSONNEL SALARIES/WAGES

List the name of each individual to whom a salary will be paid. Such individuals may include the salary for the principle investigator, other investigators, graduate student assistants, etc. The responsibilities for each person to whom a salary will be paid should be clearly outlined in the proposal. Identify name and title of the individual; specify the hourly rate and the total planned wage. Enter the eligible fringe rates as a line item (up to 10%) as provided in the budget template. Identify the amount of the salary for which The Center funds are requested, as well as any matching funds.

2. CONSULTANT/CONTRACTUAL SERVICES

You may need to engage a consultant or contract for specific services in order to complete your project. Consultant services are primarily advisory in nature requiring professional expertise to solve clearly delineated problem. The use of a consultant is expected to be infrequent and the role of these individuals should be clearly described in the proposal, to include:

- Services performed
- Number of hours/days and rate of compensation
- Travel, and other related costs

Services may include expenses such as the engagement of a statistician, or transcription assistance.

3. OTHER DIRECT PROJECT EXPENSES

Travel. Identify all travels necessary to complete the project, to include transportation to study sites and attending meetings and conferences. Do not include travel expenses to the Healthcare Design Expo & Conference during which you will present the results of your project. Describe each episode of required travel in the proposal including the following details:

- Include number of people, number of days, purpose and location of travel
- State exactly which relevant meeting you plan to attend to present data
- For airfare, use US flag carriers only (unless unavailable)
- Include a breakdown of costs for airfare, meals, lodging, and ground transportation
- Ask for reasonable amounts

b. Equipment. Identify any equipment that you need to rent or purchase in order to complete the project. Describe the equipment requirement in your proposal and:

- Provide justification, if equipment upgrades are required
- Identify maintenance and service contract expenses

c. Materials and Supplies. List all materials and supplies needed to complete the project. This may include expenses such as participant financial incentives to participate in the project, focus group support like refreshments, software purchases necessary to complete the study. In all cases, the purpose of the item must be clearly described in the proposal.

d. Publication. Identify any costs associated with preparing the results of the study for publication as a poster, paper or presentation.

4. INDIRECT COSTS

Indirect costs represent those expenses that cannot be easily identified with a single project, but are necessary to complete your project. They include items such as office supplies, expenses associated with the use of a facility, photocopying documents for IRB approval, and printing floor plans.

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NIA RFP CHECKLIST

Your proposal will not be reviewed unless the following items are included. Please indicate they are included by initialing each of the RFP requirements listed below:

_____ Approved templates were used without modification
_____ Information webinar attended (indicate date here:_____)
_____ Abstract (as outlined the RFP)
_____ Proposal Description (as outlined the RFP)
_____ List of Tasks & Milestones (as outlined the RFP)
_____ Budget Narrative
_____ Budget Worksheet
_____ Readiness: Qualifications, Feasibility, Human Subjects
Industry Contribution: Innovation & New Knowledge, Communications Plan
_____
_____ Appendix: CV & Contact Information
_____ Appendix: Approval of thesis proposal (if student)
_____ Appendix: One letter of support (personal) AND one letter of support (research study)
_____ Appendix: Letters of support from proposed study sites
_____ (Name of site1) _____
(Site 2) _____
(Site 3) _____
_____ Appendix: Research instruments

Does the research study involve human subjects?
___ No
___ Yes

If yes, Does the study have IRB approval? Date of approval ___/__/___
___ No plans to obtain IRB approval
___ IRB approval is in process

Are there any real or perceived Conflicts of Interest?
_____ Yes. If yes include description in application.
_____ No. If no include a statement "I have no conflicts of interest" in the application.

Which of the following Research Priorities does your proposal address?
_____ Occupant outcomes
_____ Population health management
_____ Design for behavioral health
_____ Influence of technology on healthcare design
_____ Tools, techniques, and approaches to support healthcare design research and practice.
_____ Other. Please explain.

_____
_____
_____