Northwestern Medicine®
Northwestern Memorial Foundation

BAUM FAMILY FOUNDATION

ALVIN H. BAUM CLINICAL SIMULATION RESEARCH GRANTS INITIATIVE

FISCAL YEAR 2015 REQUEST FOR PROPOSALS

Electronic copies of applications are to be submitted to NMFResearch@nm.org and hard copies to:

Alvin H. Baum Clinical Simulation Research Grants Initiative
c/o Amy Lobner
Northwestern Memorial Foundation
251 East Huron Street
Suite 3-200
Chicago, IL 60611

SUBMISSION DEADLINE

Friday, June 5, 2015 by 5:00 P.M.

Investigators seeking assistance in identifying collaborations or specific simulation-related research resources should contact Dr. Mark Adler via phone at 312.503.7700 or email simulation@northwestern.edu.

For additional information, please contact Amy Lobner at 312.926.5799 or via e-mail at alobner@nm.org.

Introduction

Northwestern Memorial Foundation (NMF) in collaboration with the Baum Family Foundation announces the availability of two grants supporting work in the field of simulation designed to enhance healthcare reliabilty for Northwestern Medicine (NM) medical and nursing staffs, management, and trainees. These awards are intended to enhance the mission and strategic plan of Northwestern Medicine and will help NMF achieve the following specific goals:

- Enable distinguished NM and Northwester University Feinberg School of Medicine (FSM) clinical, research, educational and community service programs through the strategic allocation and use of NMF resources.
- Provide exemplary stewardship of donor funds and all funds granted through NMF.
- Generate extraordinary philanthropic support by matching the generous intent of NM supporters with NM needs.
- Assure NM institutional values throughout the culture and organization of NMF.

NMF Mission

- NMF attracts extraordinary philanthropic resources by matching the generous intent of donors with the needs of NM and its affiliates.
- NMF serves donors through personal relationships and consistent communication.
- NMF provides exemplary stewardship of donor and foundation resources.
- NMF provides substantial support to NM's role as one of the leading academic medical centers in the United States by investing in patient care, research, education, and community service missions.

Objectives of the Alvin H. Baum Clinical Simulation Research Grants Initiative

The Alvin H. Baum Clinical Simulation Research Grants Initiative is seeking proposals that provide unique **hypothesis-driven** projects that have the potential to improve clinical care via simulation-based training, the use of simulation to evaluate the clinical environment, and the development of novel technologies to emulate the clinical environment. Simulation in healthcare has consistently been applied to enhance healthcare reliability, impacting culture and processes that radically reduce sub-optimal diagnosis and/or therapy and effectively respond when conditions which may adversely effect outcomes do occur.

Award Specifics

Only one project submission will be accepted from each Principal Investigator.

Research projects especially encouraged are those that would advance clinical care in the following ways:

- Simulation-based research that involves patient-centered outcomes.
- Simulation-based interventions which impact clinical outcomes.
- Simulations in the clinical environment which inform quality and safety leadership.
- Assessment of healthcare providers which are interdisciplinary in nature and target quality and safety goals.
- Simulation involving health care providers which explore the cognitive aspects of the delivery of highly reliable care.
- Simulation assessing health care providers performance over time

Ideal proposals will incorporate outcomes that are: 1) clinically meaningful, and 2) experienced and reported by patients.

Review Criteria
Ideal proposals will clearly demonstrate the following elements:

- The proposal is **hypothesis-driven.**
- The proposal **describes the metrics** to be used to assess the proposal's success.
- The proposal represents a unique opportunity for innovation and recognition.
- The investigator has identified an appropriate infrastructure to conduct the project.
- The proposed research has the potential to lead to meaningful impact on clinical care.
- The proposal provides a clear definition of objectives, a schedule of steps and/or processes with a corresponding timeline and the anticipated end products or results.
- The proposal should include a clear statement of how the project will support the goals and objectives of Northwestern Medicine.
- The project has the potential to be published in peer-reviewed journals and/or replicated at other institutions.

Scoring Procedures
Each grant application will be scored by at least two reviewers on the committee. Each reviewer will assign a single, global score that reflects the project's impact based on the review criteria, with emphasis on each criterion depending on the nature of the application and its individual strengths.

High-scoring applications will be discussed by the commitee.

Scoring Criteria

1. Significance
    a. Does the project address an important unmet health need?
    b. If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved?
    c. How will successful completion of the aims change the methods, technologies, treatments, services, or preventative interventions that drive this field?

2. Investigator(s)
    a. Are the PIs, collaborators, and other researchers well suited to the project?
    b. If Early Stage Investigators or New Investigators, do they have appropriate experience and training?
    c. If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)?
    d. If the project is collaborative, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?

3. Innovation
    a. Does the application challenge and seek to shift current clinical practice paradigms by utilizing novel approaches or methodologies, instrumentation, or interventions?
    b. Are the approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense?
    c. Is a refinement, improvement, or new application of approaches or methodologies, instrumentation, or interventions proposed?

4. Approach
    a. Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project?
    b. Are potential problems, alternative strategies, and benchmarks for success presented?
    c. If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

5. Environment
    a. Will the scientific environment in which the work will be done contribute to the probability of success?
    b. Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed?
    c. Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

6. Budget
    a. Is the budget reasonable and appropriate for the request?

7. Additional Review Considerations
    a. Protection of Human Subjects from Research Risk
    b. Inclusion of Women, Minorities and Children in Research
    c. Care and Use of Vertebrate Animals in Research

Award Details

Eligibility: Applications will be accepted from all NM-affiliated medical staff or NM non-physician staff. PhDs may apply, but collaboration with a medical faculty co-principal investigator affiliated with NM is strongly encouraged.

Funding Levels: One-year grants will be awarded up to a maximum of $50,000 each.

Project Description: These awards are focused on providing funding to support original and innovative research opportunities that are scientifically promising or have potential to advance Northwestern Medicine strategies. Ideal simulation proposals should challenge existing paradigms of clinical practice, explore an innovative hypothesis, or address critical barriers to reliable healthcare. Proposals should also develop or employ novel concepts, approaches, methodologies, tools, or technologies for an area.

This award category is not limited to a specific clinical or research domain.

Budget Restrictions:

1. Indirect Costs: No indirect costs will be funded, including but not limited to space. Costs associated with the use of the simulation lab are acceptable.

2. Travel: Travel will not be funded unless it is a vital component to the project's success. Travel expenses must comply with NMF's travel spending policies, which limits total travel expenditures to $1,500 per trip per person.

3. Salary Support: Salary support for investigators to directly work on their proposal is appropriate to include in budget requests. Salary support for positions including, but not limited to research assistants, technicians, and analysts will also be accepted in budget requests.

4. Capital Equipment: Requests for capital equipment will be carefully scrutinized and will require substantial justificaiton. Requests for simulator-related equipment are acceptable.

Proposal Format

All proposals should be no more than five pages (excluding title page, references and attachments) and include the following information:

I. Title Page – will be generated from steps 1 and 2 of the application process on the grants submission website and should include a project abstract in lay language limited to 200 words.

II. **Project Overview – <u>FIVE PAGES MAXIMUM</u>** (excluding references)
   a. Project Title
   b. Statement of How Project will Advance NMF's Mission and the Alvin H. Baum Clinical Simulation Research Grants Initiative Objectives
   c. Project Introduction and Background
   d. Project Hypothesis
   e. Project Scope
   f. Specific Goals and Objectives
   g. Scientific Methods
   h. Project Timeline (outline specific steps)
   i. Connectivity with Other Previous or Existing Projects and Programs
   j. Project Participants (individual departments, centers, etc.)
   k. Background and Qualifications of Project Participants
   l. If Animals Are Utilized, Explanation of How Research will Lead to Enhanced Clinical Diagnosis or Treatment in Human Subjects
   m. Expected Outcomes and How Each Outcome will be Measured
   n. Critical Success Factors
   a. Amount Requested *(maximum of $50,000 for this award)*
   b. Description of Resource Need and Intended Use of Funding
   o. Additional Current and Pending Sources of Funding for this Project

III. **Required Attachments**
   a. Attachment 1: Detailed Project Budget* Signed by Appropriate Department or Division Leader
   Note: Budgets may be reduced based on reviewers' comments. Principal Investigators may be asked to resubmit revised budgets if necessary.
   a. Attachment 2: Other Support Document*
   b. Attachment 3: Describe Any Potential Conflicts of Interest (if applicable)
   c. Attachment 4: Biographical Sketch*
   d. Attachment 5(+): Additional Relevant Information (if applicable)

* Templates for the Detailed Project Budget, Other Support Document, and Biographical Sketch are available through the grants submission website.

<u>Submission Information</u>

Please submit an electronic copy of your application through the grants submission website: https://grants.nubic.northwestern.edu/welcome. Applicants and administrators may log into the website using their Northwestern University NetIDs and passwords.

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Review: A scientific review committee chaired by Gary Noskin, MD, Professor of Medicine and Diane B. Wayne, MD, Vice-Dean of Education and Professor of Medicine, Northwestern University Feinberg School of Medicine will review all proposals and make recommendations. The recommended proposals will be forwarded to the NMF Executive Committee for final approval.

The following individuals, among others, will serve on the review committee. Please describe any potential Conflicts of Interest in Attachment 3 (if applicable).

Gary Noskin, MD (Co-Chair)	Steven Newman, MD
Diane B. Wayne, MD (Co-Chair)	Sean O'Connor, MD
Joel Friedman (Benefactor)	Christine Park, MD

Deadline: The application submission deadline is **Friday, June 5, 2015 at 5:00 p.m.** If you have any questions, please contact Amy Lobner at 312.926.5799 or alobner@nm.org.

Grant Award: Notification letters will be sent to all applicants. If the project was selected for funding, the letter will indicate if additional documentation or steps are required prior to the initiation of the project.

These steps include:

- Following receipt of notification, grant awardees will be asked to obtain Institutional Review Board (IRB) and/or Animal Care and Use Committee (ACUC) approval, if applicable.
- Contracts will be executed between Northwestern Memorial Hospital and Northwestern University upon receipt of all documentation. Once a fully executed contract is received, 80% of funding will be sent to Northwestern University and the remaining 20% is granted upon receipt of a final progress report.

Program Administration: The Alvin H. Baum Clinical Simulation Research Grants Initiative will be administered by NMF with proposal review and recommendations from the scientific review committee.

Changes: All changes in scope, budget, and personnel must be submitted in writing to Amy Lobner for pre-approval by sending an e-mail to alobner@nm.org.

Stewardship: A brief interim report will be requested at or about the mid-point of the project. A brief final report (1-2 pages) is to be submitted to Amy Lobner in both hard copy and electronic copy in September 2016. These reports are to follow the template supplied by NMF include the outcome of the proposal along with budget versus expenditure information. Such stewardship accountability reports will be shared with the scientific review committee and the NMF donor community.

Publications: Publications resulting from this work are to acknowledge the support of the "Northwestern Memorial Foundation Alvin H. Baum Clinical Simulation Research Grants Initiative". A copy of the publication should be sent to Amy Lobner at NMF.

Presentations: Grant recipients may be asked to present their project findings at an NMF meeting or event.