



2019 Duke AHEAD Grant Proposal
Due by 5:00 pm 06/24/2019

Check one:

- regular small Duke AHEAD grant - proposal with budget up to \$5,000**
 targeted IPEC Duke AHEAD grant - proposal with budget up to \$25,000

Principal Investigator/School/Department: Dr. Margie Molloy/Duke School of Nursing/Center for Nursing Discovery

Collaborator(s)/School(s)/Department(s):

1. Dr. Wayne Thomann/Duke University Health System/Department of Community and Family Medicine/OESO Administrator 2. Dr. Remi Hueckel/Duke University School of Nursing 3. Dr. Margaret Bowers/School of Nursing 4. Ms. Melinda Blazar/Duke University Community and Family Medicine/Physician Assistant 5. Dr. Amy Pastva/Duke University Orthopaedic Surgery/Physical Therapy

Focused question: Can a faculty-led “train the trainer” simulation-based education (SBE) program be deployed to teams of healthcare students to connect IPE and patient safety initiatives?

Background: (including brief review of prior research)

The current climate for IPE, despite numerous efforts and best intentions, is poorly defined, inconsistent, fragmented, and non-standardized. Implementing interprofessional collaboration using a simulation-based IPE curriculum historically comes with a set of challenges. Common concerns include the traditional compartmentalization of disciplines and regulatory bodies. Role confusion within each profession is seen as a hindrance to implementing simulation-enhanced IPE. Barriers related to the cost for purchasing equipment (or space in existing simulation centers) and the time necessary for planning often quell efforts in development of IPE initiatives. As per Reeves et al. (2013) success “involves a negotiated agreement between professionals which values the expertise and contributions that various healthcare professional bring to patient care”. The success of faculty working together requires mitigation of power dynamics, poor communication patterns, lack of understanding of roles and responsibilities, and conflicts arising from different approaches to caring for patients. Effective teamwork requires specific education directed at working as an effective team and team member, as well as the opportunity to practice the learned concepts. Health profession’s education currently offers limited opportunities for practiced interaction with students of other disciplines. Simulation offers an opportunity to address these needs. Experiential learning with simulation is a useful method for educating healthcare students and providers in both discipline-specific experiences and in IPE activities. SBE therefore is an effective pedagogy to initiate and stimulate IPE endeavors. The Interprofessional Education Collaborative Expert Panel (2011) connects the work done by the

Institute of Medicine's (IOM) core competencies for all health professionals (IOM, 2013). Interprofessional education occurs "when students from two or more professions learn about, from and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010). Project collaborators envision all participating faculty and students to deliberatively work together with a goal of building a safer and better patient-centered and community/population oriented U.S. Health care system (Interprofessional Education Collaborative Expert Panel, 2011). The Core Competencies for Interprofessional Practice (IPEC, 2016) provide a framework for the exploration of the current state, opportunities, barriers/challenges, and strategies for simulation enhanced IPE. The 38 competencies are organized under four domains (Values, Ethics, Roles/Responsibilities, Interprofessional Communication, and Teams/Teamwork). Project collaborators will engage in designing simulation-based IPE scenarios using a small group problem-based learning discussion format. Once these "tabletop-like" simulations are designed, the train the trainer process can start with a targeted group of faculty who have interest in IPE initiatives (recruited through Duke AHEAD). This educational module will be designed to implement simulation-based IPE to enhance patient safety through an interactive workshop. Hands-on practice with coaching from project collaborators will highlight the teaching strategies needed to facilitate tabletop simulations. A facilitator guide will be developed to assure consistency in the delivery of the content. Once trained, participating faculty, under the guidance of the project collaborators, will engage in training small groups of students from the various health-related fields on campus. The intent of the project is to increase the number of faculty who will engage in evidence-based simulation-enhanced IPE activities as well as engage interdisciplinary groups of students. Tabletop simulations will be conducted in the Duke School of Nursing's Center for Nursing Discovery.

Specific aims:

1. Provide participating faculty and students from multiple healthcare disciplines the tools needed to link IPE to evidence-based quality and patient safety outcomes. 2. Explore how best practices in simulation-enhanced IPE can be utilized to create systematic approaches for developing interprofessional competencies. 3. Support faculty from multiple disciplines to create simulation scenarios to ensure inclusion of and alignment with IPEC competencies. 4. Recruit strategically mixed groups of 4 students/group as learners in faculty-led simulation enhanced IPE scenarios over a set period of time. Engage the faculty and students in taking part in IPE planning, design and implementation teams

Project Plan, including brief description of steps and/or timeline:

Project collaborators will meet over the month of December to develop tabletop simulations that will be used for project training and implementation. The proposed project implementation will run over 5 months, January through May 2020. Project collaborators will engage in a train-the-trainer program for interested faculty from the schools of medicine, nursing, physical therapy program, and physician assistant program. A total of 30 IPE faculty will be recruited and trained over this time in 2 hour sessions and will then offer this simulation-enhanced IPE to small groups of students who represent the on-campus healthcare programs. Both faculty and students will engage and take part in further IPE planning, design,, and implementation teams to assure sustainability of the project. Students will receive a small stipend for their participation and feedback (\$30 per 2 hours session). The goal is to create 15 teams of IPE students to engage in this training (for a total goal of 60 IPE students). Project dissemination will occur from June

through the September 2020 presentation at Duke AHEAD Education Day. 3 IPE Survey Tools will be used a pre- and post-intervention/innovative surveys: 1. ICCAS- Interprofessional Collaborative Competencies Attainment Survey 2. RIPLS- Readiness for Interprofessional Learning Scale Questionnaire 3. TeamSTEPPS Teamwork Attitudes Questionnaire

Outcome measures: (please select from among the following)

- Pre- and post-intervention/innovation surveys
- Qualitative analysis (including focus groups or interviews)
- Post-intervention/innovation satisfaction survey
- Attendance figures/usage data
- other (please provide a brief description – max 20 words)

Resource needs and budget:

Funding will be available for a 12-month period. Please fill in the table below and provide justification/description for each item below. Additional budgetary support may be available through DASHE vouchers for editorial support, data management, education research commons, and more (see <https://dukeahead.duke.edu/how-we-can-help/duke-ahead-supporting-health-professions-educators>).

If submitting a proposal for a targeted IPEC grant, please provide an estimate of the time/effort you will expend on this project. PI support may not total more than 25% of the requested funds. If submitting a proposal for a regular (small) grant, PI may not request financial support and it is not necessary to estimate time/effort. Administrative support for either type of grant is available through “consultant costs.”

		Estimated Cost
PI support (for IPEC grant only)	[PI time/effort =]	\$0.00
Consultant Costs	Statistician Consultation	\$700.00
Equipment		\$0.00
Computer	Hardware (\$1500/laptop)	\$0.00
	Software	\$0.00
Supplies		\$0.00
Travel	(1,500/trip)	\$1,500.00
Other Expenses	Student participation Stipend \$30/2 hour IPE session X 60 students	\$1,800.00
Other Expenses	Meal provision at IPE faculty and student training sessions	\$1,000.00
Total Costs for Proposed Project		\$5,000.00