Scholarly Project Instructions and Examples.

The scholarly medical education project proposal is an important part of the application to become an Academy Scholar. The project can be related to any point in the medical education continuum from pre-med student through continuing medical education, although more likely it will be related to medical or graduate medical education. It would be most appropriate if the project is related to your daily teaching responsibilities. It could also be related to how to provide information to providers that will improve the quality of patient care. It is not expected that the project description be fully formed and the description should related to your ideas at the time of the application. Preliminary data is not at all expected or required. One of the goals of the Academy Scholar program is to help you refine your project and guide you in its implementation.

The maximum length of the project description is 1000 words (2-3 pages) and if you want to include any references, these do not count toward the page limit. Please use this format for you project description:

A. Introduction

1. Rationale / Purpose of the Project:

   Describe the need that this project will fore fill, e.g., a revised curriculum, a teaching evaluation tool. Why is it important?

2. Specific Aims:

   In a few sentences describe exactly what you hope to accomplish for not more that 3 specific aims.

B. Project Plans

1. Methods and Timeline:

   Describe what you indent to do (e.g., development of a new curriculum, survey instrument, evaluation instrument, etc.) during the program and when within the two year Academy Scholarship will each part be accomplished.

2. Outcomes and Evaluations

   What are the expected outcomes from this project? How will you measure and asses these outcomes (e.g., participant surveys, test scores, observed interactions, etc)

3. Feasibility and Limitations.

   What do you think the problems in completing this study will be and how will you plan to work around them?
Your project plan does not have to be complete and it is expected that it will be modified and improved by your participation in the Scholars program. For example, you may be planning to use a survey instrument to find out the knowledge and attitudes that a group of learners have prior to the intervention. It is not necessary that the survey tool be included in the application and it would be expected that you will use the knowledge about designing such tools gained from the Scholars program in designing your survey.

The following examples illustrate exemplary scholarly project descriptions.
A Communication Skills Curriculum for Pediatric and Obstetric Providers

A. Introduction

1. Rationale/Purpose of the Project:

Communication between obstetric and neonatal teams participating in high-risk deliveries is crucial to ensure proper coordination of maternal and newborn care. A recent analysis by JCAHO on sentinel events in patient care that resulted in either perinatal mortality or permanent disability cited a 72% occurrence of communication breakdown and a 40% occurrence of poor orientation and training of obstetric and neonatal teams.

Interpersonal and Communication Skills (ICS) is a core competency and comprises a large part of the clinician’s daily activities, including interactions with families, nurses, consultants, colleagues and other medical staff. In the delivery room, the importance of good communication between and among nurses and doctors on the neonatal and obstetric teams is evident during high-risk or emergent deliveries, where poor communication can lead to more frequent or serious errors.

2. Specific Aims:

Primary Objective: To develop, implement and refine an interdisciplinary educational curriculum focused on ICS that uses simulation training as an educational tool.

Secondary Objective: To evaluate the effectiveness of this ICS curriculum by assessing the change in communication skills of pediatric and obstetric providers during actual deliveries before and after simulation training.

B. Project Plans:

1. Methods and Timeline:

Phase I (months 1-5) – Assessment of current attitudes and communication practices, and curriculum development.

During the initial 1-2 months of this project, fellows, residents and nurses will be surveyed to understand the current attitudes and potential barriers to building good communication skills. Communication will be observed and evaluated in the delivery room using a communication assessment tool, focusing on three key time points when communication between the neonatal and obstetric teams are important: 1) obstetric communication of relevant maternal and fetal history when the pediatric team is called to assist during a delivery, 2) obstetric communication of pertinent maternal history and any neonatal resuscitative efforts during the hand-off of newborn care to the pediatric team as the team arrives for the delivery, and 3) pediatric communication of the infant’s clinical status during and after resuscitation to the obstetric team and the baby’s family.

The communication survey and direct observation to evaluate current communication practices will be used to guide development of the curriculum. The curriculum will require: 1) a high-risk delivery scenario that stresses the importance of good communication between teams, 2) a checklist of necessary information that needs to be exchanged between teams during the three key time points during deliveries, 3) teaching materials that focus on identified deficiencies in communication, 4) an evaluation tool to assess behavioral markers for good communication practices, and 5) an evaluation form on the training experience to be completed by learners immediately after the simulation session.

Phase II (months 6-14) – Joint neonatal and obstetric workshops and simulation training.

The communication workshops will involve small groups of residents and nurses from both the neonatal and obstetric staff. After the workshop teams will participate in a simulation exercise of a high risk...
delivery. They will participate in the scenario in real-time, as they would in an actual delivery. The simulations will be videotaped, and portions will be reviewed during debriefing sessions following the simulations.

During the debriefing sessions, the facilitators will encourage participants to identify communication techniques that were effective, as well as ways that communication can be improved. As learners are viewing the video of the simulation, the checklist will guide them to identify effective and deficient communication during the three key time points, and the results will help the facilitators to focus the discussion on the most relevant aspects of communication. Teaching materials that emphasize important communication points will also be reviewed during the discussion. At the end of each simulation training session, the participants will be asked to evaluate their overall experience.

**Phase III (months 15-19) – Evaluation of educational curriculum.**

After the phase II simulation training sessions are completed, communication between the pediatric and obstetric providers who have participated in simulation training will be observed and evaluated during actual patient care in the delivery room. The same communication assessment tool and surveys from the initial phase of the project will be used to identify any changes in attitudes and practices in communication.

**Phase IV (months 20-24) – Presentation at a national meeting and manuscript preparation**

2. Outcomes and evaluation:

This project will result in the development and implementation of a novel, structured and collaborative educational curriculum on ICS that will impact medical education on many levels. After the workshop and simulation exercise, learners will: 1) recognize the important positive effects of ICS on patient care, relations and outcomes, and 2) subsequently demonstrate an improvement of their communication practices during actual deliveries.

Evaluation of this project, as detailed under "Phase III", will take place through individual feedback from the participants, as well as a more rigorous pre-post evaluation, based on direct observation that the communication skills taught during simulation training translate into actual practice. A specific plan for statistical analysis will evolve when the evaluation tools are fully developed.

3. Feasibility and limitations:

The obstetric and neonatal departments have already demonstrated enthusiasm for collaborative simulation training. With the development of a collaborative educational curriculum, participation from neonatal teams will increase to include all delivery room nurses, neonatal fellows and pediatric interns, as well as the majority of second-year pediatric residents within the timeline described above. The main limitations will be scheduling for residents and nurses to participate in the workshop and simulation exercise. During the evaluation phase, there may be members of the team being observed who have not had the ICS training and this will complicate the data analysis.
Geriatrics Immersion Experience for Chief and Senior Residents (GIECSR)

A. Introduction

1. Rationale/Purpose of the Project:

The quality of care provided to geriatric patients is thought to be suboptimal, prompting a call for educational initiatives to bolster geriatric training for all healthcare providers. Given national workforce shortages for geriatricians, successful training in geriatrics for the healthcare workforce will depend on the collaboration of geriatricians and subspecialists in all facets of work, as clinicians, educators and researchers. This project will improve the care of older adults across multiple care settings and specialties; foster continued communication and collaboration; and address the national imperative to train subspecialty leaders in geriatrics.

The highly-regarded Chief Resident Immersion Training Program (CRIT), sponsored by the John A. Hartford Foundation, was designed to provide chief residents with a combination of training focused on improving their understanding of geriatric principles and their leadership and teaching skills. Chief Residents were selected as the target population because of the key roles they play in the quality of patient care, medical student and resident training, and mediating between faculty and residents. Participating chiefs reported improved care of older patients, better leadership and geriatric teaching skills and more collaboration between disciplines.

This project will develop a geriatric immersion experience at Maine Medical Center. Core themes of assessing vulnerable elders, palliative and end of life care and managing transitions of care will be covered in for a multispecialty audience.

2. Specific Aims: The objectives of this project are to:

1. Improve the care of older adults across multiple care settings and specialties through training of chief residents in surgical and medical subspecialties.
2. Foster continued communication and collaboration between specialty programs and geriatricians.
3. Address the national imperative to train subspecialty leaders in geriatrics and promote the career development of future academicians with geriatrics as their clinical niche.

B. Project Plans

1. Methods and Timeline:

- Needs Assessment and Curriculum Development. Focus groups of chief residents and program directors will help guide the curriculum development. Leader and facilitator’s guides will be developed.
- Participant Recruitment. Program Directors will be asked to nominate Chief Residents and selected senior residents to attend the program. In year 2, participants from year 1 will also be asked to refer their colleagues.
• **Program:** The GI ECSR program will be a day–long program. The day will kick off with a brief motivational lecture on the importance of quality care for the older adult. The day will then be divided into three two-hour modules. Each of the modules will stem from a case and include mini-lectures (brief lectures of ~20 minute length) linked to an interactive small group discussion and skill building sessions. Skill building will include crucial conversation role playing. Transitional care training may include an observed structured patient encounter focused on discharge of a hospitalized older adult that highlights key health systems information and communication skills. These small groups will be assigned to ensure a mixed representation of participants from a variety of academic homes to promote lively discussion and knowledge sharing.

• **“Pay It Forward” (Action Commitment):** At the end of the program day, each team will be asked to identify and outline one way in which they can formally pass knowledge gained through attendance at the GI ECSR to their colleagues and/or students. Impact projects may include education interventions for their trainees or patients or performance improvement interventions targeting care in their clinic or department.

**Timeline:**

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<td>September</td>
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<td>Needs Assessment</td>
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<td>Curriculum Development</td>
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<td>Curricular redesign &amp; modifications</td>
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<td>Recruitment of Participants Cohort 1</td>
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<td>Recruitment of Participants Cohort 2</td>
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<td>IMMERSION RETREAT</td>
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<td>Mentorship of participants in educational and performance improvement initiatives</td>
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<td>Further development of evaluation plan</td>
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2. **Outcomes and Evaluation:**

The GI ECSR Program will be a valuable resource to develop ongoing subspecialty collaboration and education. It will inherently lead to improved patient care and patient safety. The GI ECSR will create a new curriculum, mini-lecture series slide-set and trigger cases, all of which will be suitable for dissemination. Its impact will be magnified by its stimulus for new geriatric educational initiatives from its participants and their subspecialty departments. Lessons learned from successful implementation of this short, immersive geriatric education model will enable the future development of similar programs for other members of the interdisciplinary team. Evaluations will include qualitative and quantitative data through pre- and post-test knowledge and attitudes surveys and pre- and post test self-reporting of activities and opinions relevant to the care of the older adult. Included in these assessments will be short and long term evaluations of the training program and its perceived
impact on participants. Participant’s ongoing interaction and efforts with respect to geriatric education will be inventoried.

3. Feasibility and Limitations:

The project will be implemented as a day-long immersion training retreat. Finding a day that will allow the most number of chief and senior residents to attend will be difficult and if possible it may be best to hold the retreat outside of MMC. Finding the faculty to teach in the retreat should not be limiting as there are several geriatric faculty who have committed to participating in the program. Getting the buy-in from the residency program directors will be key.