# Scholarly Activity Program

## I. Scholarly Activity Goals and Objectives

**A. Goals:** Enrich resident experience and comply with ACGME requirements.

1. Scholarly and research activities promote and encourage the skills, attitudes and behaviors necessary for the competency of life-long learning and a disciplined professional career.
2. Scholarship enhances the quality and reputation of the training program. Quality attracts quality and excellence promotes excellence, both in current and future trainees.
3. Scholarly accomplishments distinguish trainees from their peers. They improve the competencies of the individual and enhance preparation for future training and career development.

**B. Objectives:** By completing this program, each resident will be able to:

- Conduct an effective search of the literature
- Describe the ethical and legal constraints related to biomedical research
- Construct a clear hypothesis or question for the research project.
- Organize and submit an abstract, poster or manuscript for publication and or oral presentation

## II. Definitions and requirements

The definition of scholarship encompasses four categories:

- **Integration:** Literature review, textbook chapters, meta-analyses
- **Application:** Quality improvement, patient safety, performance and process improvement and other collaborative projects with presentations or reports to an internal or external audience.
- **Discovery:** classical research projects such as case reports, case series, clinical trials, medical education research
- **Teaching and disseminating knowledge:** presentations in meetings, morning reports, CPC, Journal Club…

Projects within any of the above are considered acceptable scholarly activities.

For ACGME-reporting purposes, the following grid will be used:

| Definitions: | Pub Med ID for articles published | Number of abstracts, posters, and presentations given at international, national, or regional meetings in the previous academic year | Number of chapters or textbooks published in the previous academic year | Participated in funded or non-funded basic science or clinical outcomes research project | Lecture, or presentation (such as grand rounds or case presentations) of at least 30 minute duration within the sponsoring institution) |
|---|---|---|---|---|---|
| Resident Name | | Conference Presentations | Chapters / Textbooks | Y/N | Teaching / Presentations |
| | | | | | |

Residents are required to demonstrate evidence of scholarly activity and encouraged to participate in various activities during all stages of their training. All projects need to be reported at inception to the Research Chief Resident for documentation in the research registry.

Residents will meet with members of the Scholarly Activity Committee periodically to review their progress and receive guidance on their projects. They are required to participate in at least one scholarly activity and one quality improvement project during residency training. The Quality Improvement pathway Chief Resident will ensure that all residents are also involved in a quality improvement project. Quality Improvement projects that are disseminated meet the qualifications for Scholarly Activity. Residents are required to present their finished scholarly work for publication or presentation in a peer reviewed journal, regional or national meeting, at the Advocate Annual Research Forum or the Department of Medicine Annual Research Day. With the approval of the Director of Scholarly Activity and the Residency Program Director, residents may spend a 2-4 weeks Research Block dedicated to completion of a scholarly activity. All residents who complete a Research Block are required to present their findings at the Department of Medicine Annual Research Day.

## III. Scholarly Activity Committee

Committee members are selected by the Program Director and serve at his/her discretion without term limits.
The committee is chaired by the DOM Director of Scholarly Activity and includes the following members:

- Chief Resident for Research
- Chief Resident for QI/Patient Safety
- Chief Resident for the Medical Education Pathway
- Chief Resident for the General Internal Medicine Pathway
- Program Director
- Associate Program Director: Dr. J. Oyama
- Faculty Representative: Dr. E. Lerma
- Program Coordinator

The committee is charged to develop an effective scholarly activity program and monitor its progress for each academic year. The committee will meet regularly and report to the Residency Program Director and the Chairperson of the Department of Internal Medicine. Each resident's progress will be made available to his/her evaluator for discussion during semi-annual reviews and milestone reporting.
The committee is responsible to ensure that all research conducted within the residency program abides by Advocate's code of ethics and safe conduct.

## IV. Didactics

- Basic Biostatistics (Dana Villines)
- Formulating your research question and effective literature search
- Research Conduct: Ethics and Etiquette
- Preparing and Submitting an IRB
- Writing up your research for submission: Preparing abstracts and papers
- Meet the Editor: How to get your scholarly activity published

Research Week:

- Poster and Oral Presentation Skills
- Resident Research Presentations
- Keynote speaker

## V. Proposed Timeline

All residents are required to participate in at least one scholarly activity and one quality improvement project during residency training. In the following timeline, Scholarly Activity encompasses traditional research, quality improvement as well as other activities outlined in the definition of Scholarly Activity.

### Over the PGY-1 Academic Year

PREPARATORY PHASE OF SA PROJECT

- Formulate the "question" for study
- Review the literature, confirm scholarly appropriateness
- Brainstorm ideas: methods, timelines, and resources
- Complete Ethics training (http://www.citiprogram.org)
- Register Project with Chief Resident for Research

OTHER POTENTIAL SCHOLARLY ACTIVITIES

- Intern report presentation
- Poster presentation, Clinical Vignette, Case Report
- Topical teaching session for students via a prepared presentation

### Overt the PGY-2 Academic Year

INVESTIGATIVE PHASE OF SA PROJECT

- Finalization of project details
- IRB submission (when applicable)
- Data acquisition and preliminary display and analysis
- Group meeting to review progress
- Regular meetings with co-investigators and faculty mentor
- Progress report to Chief Resident for Research every 3 months
- Maintain Ethics certification

OTHER POTENTIAL SCHOLARLY ACTIVITIES

- Senior Morning report
- M&M
- EBM Journal club presentation
- Poster, vignette, abstract
- Local, regional or national presentations
- Topical didactic session for residents or students via a prepared presentation

**Over the PGY-3 Academic Year**

SYNTHESIS PHASE OF SA PROJECT
- Complete data collection and analysis
- Prepare presentation, abstract, manuscript
- Maintain Ethics Certification

OTHER POTENTIAL SCHOLARLY ACTIVITIES
- Present results at local, regional and/or national forum
- Submit abstract, manuscript for publication
- CPC, M&M, student lectures, QI presentation

## VI. Research Funds and Awards

Travel and other expenses for residents to present projects at major scientific meetings are at the discretion of the Program Director. To qualify for reimbursement, projects must have been recorded in the Research Registry maintained by the Chief Resident for Research.

The annual Departmental Resident Award for Scholarship is granted for outstanding achievement in scholarly activity during residency training. The recipient is selected by the Awards Selection Committee based on the recommendation of the Scholarly Activity Committee.

## VII. Evaluation Methods

Formative face-to-face feedback to residents by scholarly activity mentors should occur intermittently (but at least quarterly), integrated with research discussions. For the research block rotation, mentors will complete online competency based evaluations of each resident. The evaluation is shared with the resident and is sent to the residency office for review and is part of the resident file. Residents are also encouraged to complete an evaluation of the rotation mentor and the research experience.

## VIII. Applicable Curricular Milestones

### PRACTICE-BASED LEARNING AND IMPROVEMENT

**PBLI-A3** Reflect on audit compared with local or national benchmarks and explore possible explanations for deficiencies
**PBLI-A4** Identify areas in resident's own practice and local system that can be changed to improve effect of the processes and outcomes of care.
**PBLI-A5** Engage in a quality improvement intervention.
**PBLI-B3** Develop a system to track, pursue, and reflect on clinical questions.
**PBLI-C1** Access medical information resources to answer clinical questions and library resources to support decision-making.
**PBLI-C2** Effectively and efficiently search NLM database for original research articles.
**PBLI-C3** Effectively and efficiently search evidence-based summary medical information resources.
**PBLI-C4** Appraise the quality of medical information resources and select among them based on the characteristics of the clinical question.
**PBLI-D1** With assistance, appraise study design, conduct, and statistical analysis in clinical research papers.
**PBLI-D2** With assistance, appraise clinical guideline recommendations for bias.
**PBLI-D3** With assistance, appraise study design, conduct, and statistical analysis in clinical research papers.
**PBLI-D4** Independently appraise clinical guideline recommendations for bias and cost-benefit considerations.
**PBLI-F4** Reflect on feedback in developing plans for improvement.
**PBLI-H1** Actively participate in teaching conferences.
**PBLI-H2** Integrate teaching, feedback, and evaluation with supervision of intern's and student's patient care.
**PBLI-H3** Take a leadership role in the education of all members of the health care team.

### INTERPERSONAL COMMUNICATIONS SKILLS

**ICS-A5** Utilize patient-centered education strategies.
**ICS-D3** Engage in collaborative communication with all members of the health care team.

### PROFESSIONALISM

**P-A4** Uphold ethical expectations of research and scholarly activity.
**P-C1** Communicate constructive feedback to other members of the health care team.
**P-E2** Maintain ethical relationships with industry.
**P-E3** Recognize and manage subtler conflicts of interest.
**P-F5** Recognize the scope of his/her abilities and ask for supervision and assistance appropriately.
**P- K1** Recognize that disparities exist in health care among populations and that they

may impact care of the patient.

**P-K2** Embrace physicians' role in assisting the public and policy makers in understanding and addressing causes of disparity in disease and suffering.

**SYSTEMS BASED PRACTICE**

**SBP-B2** Work effectively as a member within the interprofessional team to ensure safe patient care.

**SBP-B3** Consider alternative solutions provided by other teammates.

**SBP-C1** Recognize health system forces that increase the risk for error including barriers to optimal patient care**.**

**SBP-C2** Identify, reflect upon, and learn from critical incidents such as near misses and preventable medical errors.

**SBP-C3** Dialogue with care team members to identify risk for and prevention of medical error.

**SBP-C4** Understand mechanisms for analysis and correction of systems errors

**SBP-C5** Demonstrate ability to understand and engage in a system level quality improvement intervention.

**SBP-C6** Partner with other healthcare professionals to identify, propose improvement opportunities within the system.

**SBP-D2** Understand how cost-benefit analysis is applied to patient care (i.e. via principles of screening tests and the development of clinical guidelines)

**SBP-D3** Identify the role of various health care stakeholders, including providers, suppliers, financiers, purchasers, and consumers and their varied impact on the cost of and access to health care.