GME Lunch and Learn

An Internal Medicine Scholarly Activity Initiative: Facilitate Housestaff Involvement in Scholarly Activities

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Objectives

- Provide programs with resources to facilitate resident mentorship in scholarly activity
- Outline small group workshops that have been used to promote research skills and facilitate scholarly activity
- Demonstrate use of novel web-based resource to track housestaff productivity
Background

• Since 2014, improving opportunities for scholarly activity has been a program goal

• Interventions: resources for residents (such as conference travel funding), providing workshops (voluntary) that focused on research skills or mentorship, widespread notification of conference abstract deadlines (monthly emailed newsletter, calendar in conference room)

• We saw a rise in publications and conference presentations

Scholarly Activity 2014-2016
Background

- Despite that progress, we continued to see declining satisfaction with opportunities for scholarly activity on the annual ACGME survey.

![ACGME Survey Results](chart)

Our Initiative

- “The Scholars Council” curriculum was started for the 2016-2017 academic year.

- Goals:
  - Reach ALL residents and interns
  - Compile resources
  - Teach basic research skills
  - Residents to report their progress on scholarly projects
Reaching all residents

- Senior residents are on X + Y schedule (6 weeks + 2 weeks)
- The scholars council curriculum was delivered 2-3 x per year for each of the 4 clinic cohorts (1-2 hours of the afternoon)

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<th>August</th>
<th>September</th>
<th>October</th>
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- Interns are on a traditional schedule. They are scheduled for a mandatory session during their intern retreat in August, voluntary workshop in Spring

Resources to Facilitate Scholarly Activity
Resources to Facilitate Scholarly Activity

• Instructional
  • “How-To” articles provided as PDFs
  • Powerpoints and tutorials from previous workshops

• Example documents from other residents
  • Databases
  • IRB proposals
  • Manuscripts/Abstracts

• USF wide resources
  • IMPACT
  • GME statistician
  • RedCap institutional access instructions
  • IRB links to templates and guides

Using Workshops to Teach Skills
Teaching research skills in small groups

- Critical Review of a Case Report Manuscript Workshop (Seniors)
- Conference Abstract Review Workshop (Interns)
- Letter to the Editor Workshop
- Senior Resident Forum Discussion – Performing Longitudinal Research

Case Report Manuscript Workshop

- Senior residents are assigned into 4 small groups of 3-4
- The receive a checklist and a manuscript one of their colleagues volunteered to be reviewed
- They have 45 minutes to review the manuscript based on their checklist
- Each group then presents their recommendations to the author for each of the four checklists used
Conference Abstract Workshop

- Interns are placed in small groups of 2-3

- They are provided an abstract that a colleague has volunteered to be reviewed and a checklist of tasks to complete during the review

- Since abstracts are shorter, all groups complete all sections of the checklist

- 30 minutes later, each group presents their recommendations to improve the abstract
Letter to the Editor Workshop

- Workshop occurs twice per year
- Group is split into 5 small groups of 2-4 residents with similar career interests (as best possible)
- Groups are assigned an article from a journal to read prior to the workshop
- During the workshop, they begin writing a Letter to the Editor (1 hour)
- At the end of the workshop they read aloud their progress and submit to journal within one week
- Workshop resulted in 5 publications in Spring 2017
Letter to the Editor Workshop

Panel Discussion – Performing Longitudinal Research in Residency

- Towards the end of the academic year, senior residents with experience in longitudinal research lead a panel discussion
- Topics include:
  - Finding a mentor
  - Developing a research question
  - Submitting an IRB proposal
  - Creating a database
- Tips are compiled and placed in resources
Have Residents Report on their Progress

Resident Project List

- For the Academic Year 2016-2017 – residents reported their information in table format which was compiled into a Master Excel document

- 2-3 times per year they reported each project, the coauthors, their goal for the project (what journal or conference) and where the project was along the following productivity pipeline

<table>
<thead>
<tr>
<th>Conception of Idea</th>
<th>Proposal</th>
<th>Data collection</th>
<th>Data analysis</th>
<th>Drafting manuscript</th>
<th>Submitted</th>
<th>Revision</th>
<th>Accepted to journal or conference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have an interesting case or concept for research?</td>
<td>Drafting protocols, designing your database</td>
<td>Chart review</td>
<td>Statistical analysis</td>
<td>Know where you want to submit (conference or journal)</td>
<td>Waiting on decision from editors/reviewers</td>
<td>Accepted with revision: address all, return quickly</td>
<td>Not accepted: go with back-up plan, re-work and resubmit</td>
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<tr>
<td>What is your goal journal or conference?</td>
<td>IRB application process, grants</td>
<td>Literature review for research or case report</td>
<td>Review journals and conferences</td>
<td>Review author guidelines</td>
<td>Create a back up plan and start preparing for needed changes to manuscript</td>
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10/19/2017
## Project List Example 2016-2017

### Our Progress

- **Academic Year 2017-2017 Scholarly Activity:**
  - Publications:
    - 36 Peer-reviewed publications
    - Additional 15 Publications, accepted and in press
  - Conferences:
    - 95 Conference presentations
    - Resulting in 73 Abstract Publications
  - ACGME survey results
    - Improved 15% in one year

### ACGME Survey Results

<table>
<thead>
<tr>
<th>Year</th>
<th>Program Compliance</th>
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<tbody>
<tr>
<td>2014</td>
<td>66%</td>
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<tr>
<td>2015</td>
<td>61%</td>
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<tr>
<td>2016</td>
<td>56%</td>
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<tr>
<td>2017</td>
<td>71%</td>
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### Table Example 2016-2017

<table>
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<tr>
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<th>Year 1</th>
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<th>Year 3</th>
<th>Year 4</th>
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<tr>
<td>Project 4</td>
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</tbody>
</table>

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### List of Publications

- 36 Peer-reviewed publications
- Additional 15 Publications, accepted and in press

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### Conference Presentations

- 95 Conference presentations
- Resulting in 73 Abstract Publications
Future Growth

- For the Academic Year 2017-2018 – we went to a web-based program to track resident projects - Trello

- Resident groups were created (based on X + Y cohorts)
  - Each resident has a private board in the group
  - Assigned administrators can see resident boards, residents see only their board

Trello

- Residents boards are prepopulated with the columns that correlate to the productivity pipeline
- They add their projects as cards
- Within the cards – they put goals for project, authors. They can add checklists, due dates, chat with administrators of board
- Cards are mobile, drag across columns
Interactive Conference Calendar

• A shared board was created – all residents have access

Summary

• Find a time where you can reach all your housestaff
• Provide resources such as templates and examples
• Use small groups workshops to integrate basic research skills into the curriculum
• Track housestaff projects on an individual level to provide mentorship, encourage follow through, and increase accuracy of your programs metrics