

How to do scholarship in smaller departments

Magdalena Anitescu, MD, PhD, Associate Professor
Chief, Section of Pain Management
Program Director, Multidisciplinary Pain Medicine
University of Chicago Medicine
Department of Anesthesia and Critical Care

Conflict of interest

- Educational grant Medtronic for fellows education

Objectives

- Define academic scholarship
- Describe forms of scholarship
- Identify fellows opportunities to participate in scholarly projects
- Describe Program director role in mentoring fellows' scholarly activity

Outline

- The academic scholar and the school of medicine
- Fellows perspective of scholarly activity
- Program director perspective of scholarly activity

Academic scholarship-Inside Out

Feelings

- Fear
- Joy
- Sad
- Anger
- Disgust

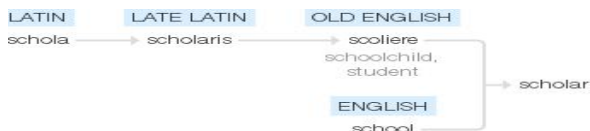


How you see it

- A Job
- A state of mind, a vocation
- A necessary thing
- An awful thing
- Everyday frustration

Scholar-definition through time

- In ancient times: one who goes to school, a pupil
- Modern: the **expert, specialist in a certain field, a distinguished academic**, a highly educated person with an aptitude for study
- Synonym: academic, intellectual, savant



The pressure-our contribution

- Are all of us geniuses in our own way?



The modern scholar

SINCE COLONIAL TIMES, the American professoriate has responded to mandates both from within the academy and beyond. First came teaching, then service, and finally, the challenge of research. In more recent years, faculty have been asked to blend these three traditions, but despite this idealized expectation, a wide gap now exists between the myth and the reality of academic life. Almost all colleges pay lip service to the trilogy of teaching, research, and service, but when it comes to making judgments about professional performance, the three rarely are assigned equal merit.

1990: a new definition of scholarly activity: beyond “teaching versus research” debate and that the familiar and honorable term “scholarship” be given a broader meaning

In the new context: Proposal

- Four entities
 - Scholarship of discovery
 - Scholarship of integration
 - Scholarship of application
 - Scholarship of teaching
- Challenges
 - How does the scholar maintain excellence in their work
 - Many high education institutions were willing to adopt but the question of assessment arose.

Noble, broad, modern...sustainable?

- 2 question arose quickly
 - What is the meaning of “scholarship of teaching”
 - How the quality of scholarship shall be measured

TO GIVE THE FOUR KINDS OF SCHOLARLY ACTIVITIES the weight that each deserves, they all must be held to the same standards of scholarly performance. The paradox is this: in order to recognize discovery, integration, application, and teaching as legitimate forms of scholarship, the academy must evaluate them by a set of standards that recognize and acknowledge what they share as scholarly acts.

Measuring quality of the scholarly work

- Goals: “measuring the quality of scholarship” or “how excellence shall be sustained”
- How was it done
 - 51 granting: **how would you decide which proposals to fund?**
 - 58 scholarly press directors: **what criteria do you use when selecting manuscripts for publication?**
 - 31 scholarly journal editors: **what do you tell referees to look for?**
- New publication:
 - 6 themes were derived, called “standards”.

Summary of Standards ^{1,2,3,4}
<p><i>Clear Goals</i></p> <p>Does the scholar state the basic purpose of his or her work clearly? Does the scholar define objectives that are realistic and achievable? Does the scholar identify important questions in the field?</p>
<p><i>Adequate Preparation</i></p> <p>Does the scholar show an understanding of existing scholarship in the field? Does the scholar bring the necessary skills to his or her work? Does the scholar bring together the resources necessary to move the project forward?</p>
<p><i>Appropriate Methods</i></p> <p>Does the scholar use methods appropriate to the goals? Does the scholar apply effectively the methods selected? Does the scholar modify procedures in response to changing circumstances?</p>
<p><i>Significant Results</i></p> <p>Does the scholar achieve the goals? Does the scholar's work add consequentially to the field? Does the scholar's work open additional areas for further exploration?</p>
<p><i>Effective Presentation</i></p> <p>Does the scholar use a suitable style and effective organization to present his or her work? Does the scholar use appropriate forums for communicating the work to its intended audiences? Does the scholar present his or her message with clarity and integrity?</p>
<p><i>Reflective Critique</i></p> <p>Does the scholar critically evaluate his or her own work? Does the scholar bring an appropriate breadth of evidence to his or her critique? Does the scholar use evaluation to improve the quality of future work?</p>
<p>¹These six standards can be applied to all four forms of scholarship proposed by Boyer: the scholarship of discovery, of integration, of application, and of teaching. The standards were derived from the analysis of information collected in 1994 by Carnegie scholars from granting agencies, scholarly press directors, and scholarly journal editors.</p>

Clinical medicine

- Discrepancy between busy clinical work and unprotected time.
- Clinical excellence (productivity) does not equate scholarship
- 2 orphan children, not recognized
 - Integration: making connections across disciplines-health outcomes, biomedical technologies and devices, health outcomes
 - Application: translation of knowledge to new and practical applications: clinical guidelines, patient safety protocols
- Framework to recognize integration and application entities-**Clinical scholarship**

Clinical Scholarship

- Systematic observation and scientifically based methods to identify, describe and solve clinical problems
- Offers potential for learning how to improve clinical practice
- Extends broadly beyond the clinical arena, examine lives of patients and families, Systematic observation encompass a patient or a health care system
- Interdisciplinary
- Dissemination of knowledge through publication, presentation, consultation, evidence of use by others, applied leadership
- Its use helps solving clinical problems, enhance clinical care and improve health of patients, families, communities

So...scholarship comes in many shapes and forms...

Fellows-happy to have matched their chosen fellowship...

- First day
 - Heavy clinic, orientation
 - By the way...write an IRB by tomorrow
 - ...and by the end of the week write that case report
 - ...and call the patients to schedule the stim
 - ...while you submit your ASRA abstract



The reality of the fellowship

- 1 year in most specialties unless research time is added,
- Small fellowships can have an additional burden.
- The fellows challenge you...
 - I am tired
 - I want to go in private practice
 - I have no idea what research means?
 - I want to focus on becoming clinically excellent



However...ACGME has requirements

IV.B.	Fellows' Scholarly Activities
IV.B.1.	The curriculum must advance fellows' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. (Core)
IV.B.2.	Fellows should participate in scholarly activity. (Core)
IV.B.3.	The sponsoring institution and program should allocate adequate educational resources to facilitate fellow involvement in scholarly activities. (Core)
IV.B.	Fellows' Scholarly Activities
IV.B.1.	The program must provide instruction in the fundamentals of research design and conduct, and the interpretation and presentation of data. (Core)
IV.B.2.	Each fellow must complete a scholarly project, the results of which must be disseminated through a variety of means, including publication or presentation at local, regional, national, or international meetings. (Core)

Fellows' thirst for knowledge does exist

- Generation of highly educated digitally native physicians
- Reserved at times
- Duty vs save the world
- A little play for their attention
- And certainly teach by example



How can we motivate our fellows? KNOW THEM!

- Involve the fellows: explain why do you do what you do, the vision
- Emphasize the greater good: how can you help others, patients, colleagues by disseminating your scholarly work
- Give responsibilities and leadership opportunities
- Give feed back and encouragement
- Flexibility in work hours at the scholarly project-work from home
- Provide educational opportunities and developments on the topic-conferences
- Allow time for personal issues (but keep track) and protected time for completion of the scholarly projects.

What scholarly project can fellows complete?

Component of Scholarship	Examples	Assessment Criteria
Discovery = advancing knowledge	Published paper Work resulting in abstract	All 4 components of scholarship should be present when looking at the sum of the <u>core faculty members'</u> work
Integration = synthesizing knowledge	Case studies or reports Patient education projects	Each resident should be exposed to each of the 4 components of scholarship and should complete at least one scholarly activity during the residency training period
Application = applying existing knowledge	Participation in national guideline panels Participation in professional societies	More stringent requirements may be instituted by the specialty-specific RRC as needed
Teaching = disseminating current medical knowledge	Preparing and delivering lecture(s) Curriculum development Development of web-based modules, etc	

- Similarly with faculty standards, fellows should be evaluated based on Boyer's 4 entities of scholarship.
- Essential is the scholarship of teaching where fellows be involved with their peers, patients, etc.

How is the scholarly work quantified?

Metrics for Scholarly Activity

Position	Pass	Fail	Commendation
Residents*	1 point/resident	<1 point/resident	≥ 1.5 points/resident on average
Fellows*	1 point/fellow	<1 point/fellow	≥ 1.5 points/fellow on average
Faculty (FTE)#	Average 2 pts/faculty member	Average < 2 pts/faculty member	Average ≥ 1.5 pts/faculty member

* One point given per publication (print-i.e. article, case report, chapter, or electronic- i.e. ACR case in point) or local, regional or national presentation/poster or electronic exhibit over the length of the program

One point given for documented activity in each of the following activities over the length of the review cycle

- Grants
- Publications
- Selected chapters, text books
- Presentation at local, regional or national meeting
- Education related service on national committees

What is considered scholarly activity

- Scholarship of discovery-research
 - Papers published is the product
 - Participating in research, research presented to scientific meeting
- Scholarship of integration
 - Multidisciplinary presentations within the institutions
 - Multidisciplinary conferences,
- Scholarship of application
 - Book chapters
- Scholarship of teaching
 - Present regional to collaborative case conferences with other fellowship programs
 - Book chapters

Scholarship work demystified

- Highly selective process for fellowship, supposedly dedicated, smart and with appropriate work ethic
- Expectations
 - Excellence in clinical care: **easy to attain** due to volume
 - Excellence in scholarly work: **hard to attain** due to time constraints
- Solutions
 - Lecture every day,
 - Attending database case reports of challenging cases-prepare
 - QA projects
 - Regional meetings presentations

It is on YOU to find solutions...

- Academic days, administrative days (chief fellows) roughly 1-2 per month (1 every other week sometimes)
- Flexibility: Review the charts from home
- Added responsibility: lead the team of house staff and medical students, work together at case reports
- Play detective: your rationale for the case to be presented, investigate the course, discuss other options.
- Be available: find cases, listen to fellows suggestions, guide do not destroy.
- Be altruistic: collaborate on book chapters, research projects

How do we do it?

- One grand rounds presentation,
- One abstract (research/case report) submission and presentation at national meetings
- One presentation at the institutional multidisciplinary meeting
- One presentation at the collaborative case conferences
 - Chicago Pain summit **AND** Collaborative case conference
- One QA project
- Attend and present at the institutional pain boards
 - Spine board **OR** Oncology pain **OR** Comprehensive pain conference **OR** Bone health meeting

Similar and different approach AGAIN...ON YOU

- “Abstract presentation in Fellow Complex Case Session at Annual Society of Cardiovascular Anesthesiologists Meeting”
- “One “writing project”. Usually a Case Report or Case Conference for the Journal of Cardiothoracic and Vascular Anesthesia”.
- “I usually have the IRB proposal written up and approved so they can hit the ground running on day 1. Then towards the end of their year I have the fellow write up the IRB proposal and get the project approved for the next fellow.”

Other ways to involve fellows

- Start them early;
 - Gradual responsibility: case report as CA1 to paper writing during fellowship
 - Fellows involved in medical student research:
 - Book chapters early, correct them in fellowship
 - Combine efforts: both fellows/ residents participation in research research
- Lead by example
 - Organized: keep record, especially in book chapters
 - “Zebra” vs “Horses”-share your experience, keep fellows engaged
 - Introduce new technology
 - Listen to their wishes: be flexible when treating cases.

Would the responsibility crush you?

- Never enough time...
- Contradictory message: scholar and clinician...clinical scholarship
- What helps
 - A good fellowship coordinator-share respirces with core PD
 - Participate in professional meetings
 - Create an academic environment for the fellows

Work with your institutional colleagues

Lead by example-create long-lasting connections

- Set expectation for your section faculty to present at grand rounds and at the national meetings
- Networking: get involved with colleagues from other institutions
- Introduce the scholarly work to fellows in a non-assuming way: be gentle not forceful
- Expect the best, deal with the worst
- Keep alumni as friends and gather at meetings
- Aim to always improve on all planes: research, clinical, educational and service.

Remember: they do what THEY SEE!

Conclusions

- Scholarship has more dimensions: discovery, application, integration and teaching
- Fellows scholarly activity is rated every year
- Fellows scholarship can be performed in various ways; research is only one component
- Be engaged with the fellows as it is a small family by now
- Make a difference, lead by example and be flexible in listening to your trainees: **guide do not destroy**
- Your small fellowship is an asset: ideas can be easily vehiculated, applied, presented and disseminated

We are all born ignorant, but
one must work hard to remain
stupid.

Benjamin Franklin

Thank you