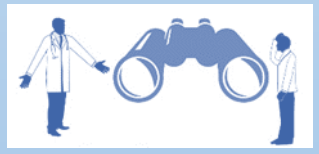

Teaching Portfolio

Somnath Mookherjee, MD
Associate Professor of Medicine
Clinician-Teacher Pathway

SECTION 1: EXECUTIVE SUMMARY

I am grateful to be a Clinician-Teacher in the Department of Medicine, University of Washington School of Medicine. This teaching portfolio summarizes my journey from first year attending physician in 2007, to my current position as a mentor and leader in academic medicine in our Division and beyond. At the heart of this journey is the enormous satisfaction I derive from being a clinician – my professional life is centered around the thoughtful, nuanced, and patient-centered care of the medically complex patients we see at the University of Washington. I aspire to optimize the care and satisfaction of these patients, and many more throughout the world by optimizing the education of future physicians. On this journey, I have come to identify with four roles which reflect my scholarly interests and have driven my academic success:

- **Excellent teacher:**

Perhaps my most valuable role is in the direct teaching of students and residents. I have made a purposeful effort to improve my teaching throughout my career, and continue in this effort to the present day. This portfolio shows how my learner evaluation scores have steadily improved year after year, and are now among the top of our group. Throughout this portfolio I have provided comments from learners, reflecting their consistent and positive evaluation of my teaching.

- **Innovator:**

Medical education is far from perfect – there is always opportunity to enhance the learning of students and residents by using creative, evidence-based educational techniques. My projects have ranged from optimizing clinical reasoning at the bedside, to teaching students quality and safety, and understanding the potential for non-patient centered care in the face of "pay for performance" forces. A common theme on this journey is rigorous inquiry and dissemination of findings: this portfolio provides summaries of several innovative projects which I have designed, executed and disseminated.

- **Faculty developer:**

Faculty Development is increasingly appreciated as a means to bolster the scholarship of an academic group and systematically improve the education of students and residents. I am at the forefront of this effort. Examples of my leadership and abilities are evident throughout this portfolio: creation of my Division's Faculty Development Program, local, regional, and national faculty development talks, founding and co-editing a Handbook of Clinical Teaching, co-authoring a guide for writing case reports and talks on how to do faculty development for program directors.

- **Regional and national leader:**

My work is increasing in national prominence through several venues. I have been asked to give talks on clinical teaching to audiences throughout the region. In terms of educational scholarship, I have published review papers and original research with rising citations. I have been asked to co-chair a national meeting evaluation committee, and was invited to be a Deputy Editor for the Journal of Hospital Medicine. This portfolio summarizes the body of work which has created this regional and national role in academic medicine.

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SECTION 2: PERSONAL INFORMATION

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2. Academic title: Associate Professor of Medicine
3. Specialty: Internal Medicine
4. Affiliation: University of Washington, School of Medicine
5. Years covered: 2007 - 2017 (present)
6. Work history:

2007 – 2008	University of Washington	• Acting Instructor	Division of General Internal Medicine
2008 – 2009	University of California, San Francisco	• Clinical Instructor	Division of Hospital Medicine
2009 – 2012	University of California, San Francisco	• Assistant Clinical Professor	Division of Hospital Medicine
2012 – 2013	University of Washington	• Acting Assistant Professor of Medicine	Division of General Internal Medicine
2013 - 2017	University of Washington	• Assistant Professor of Medicine	Division of General Internal Medicine
2017 -	University of Washington	• Associate Professor of Medicine	Division of General Internal Medicine

SECTION 3: TEACHING PHILOSOPHY

My teaching philosophy is anchored on one core belief: teaching is most effective when focused on guiding and optimizing the *behavior* of learners. This does not refer to "behavior" in the customary sense – I am not referring to the "good" or "bad" behavior of a child, but rather the totality of the words, actions, and interactions of practicing physicians that comprise physicianship. While other constructs such as knowledge, skills, and attitudes are necessary building blocks to physicianship, ultimately, it is what a physician does or says when in training and in practice – their *doctoring behaviors* – that is of paramount importance. These behaviors are how a doctor navigates complex health care systems, assures the quality of care, and ensures that a patient's experience is optimized. Thus, to summarize my teaching philosophy: *I must use effective teaching strategies which optimize the present and future behaviors of learners*.

This philosophy of focusing on doctoring behaviors resonates for several reasons. First, adult learners are motivated by teaching that is most relevant to their actual practice. Explicitly connecting teaching to future practice inspires learners to master the content and incentivizes self-directed learning. Second, the ultimate goal of everything we do as clinician-educators is to maximize the health and happiness of our patients – it is important for aspiring physicians to appreciate that our words and actions are a powerful lever to achieve that goal. Finally, focusing on behaviors fosters a learning climate where feedback is most effective and well received. Learners can de-emphasize intangible concepts such as "I need to be more thorough" and practice more concrete, behavioral strategies: "I will examine every organ system in a new patient encounter." There are three components to my day-to-day operationalization of this teaching philosophy:

1. Using evidence based, structured teaching frameworks. The Stanford Faculty Development Program (SFDP) Clinical Teaching seminar series provides a framework for optimal practices in clinical teaching. I have taken this framework to heart, and continually refer to the seven categories: learning climate, control of session, communication of goals, promotion of understanding and retention, evaluation, feedback and promotion of self-directed learning. By being attentive to these elements, either with self-reflection or feedback elicited from learners and peers, I constantly try to improve my ability to influence future behaviors with my teaching.

2. Providing high-yield feedback, both to peers and to learners. By focusing on behaviors, I can give high-yield, objective feedback based on observations, rather than relying on subjective evaluations prone to bias or uncertainty. For example, a medical student I worked with was distraught because she felt that had committed a medical error. She felt that this reflected on her potential to become an excellent physician. By purposefully reviewing the event in terms of specific, observable actions, we disassembled the story she was creating about herself, and identified a behavior that had led to the error. This feedback allowed her to strategically modify her behavior in future instances, and realize that she was quite capable of becoming an excellent physician. Similarly, a colleague who had received low evaluation scores asked me to observe her on teaching rounds. Using the SFDP framework, I identified teaching behaviors which were sub-optimal: she was repeatedly interrupting the team, thereby negatively impacting the learning climate. By stating my feedback in terms of objective observations ("I noticed that you asked the resident questions four times during his presentation") we were able to strategize techniques to foster a positive learning climate on future rounds.

3. Sharing teaching strategies and investigating innovative strategies. The cover of this teaching portfolio shows pictograms depicting aspects of optimal feedback techniques and aspects of optimal clinical teaching. I use these graphics for talks, workshops and teaching materials on clinical teaching. By sharing my teaching philosophy and strategies, I benefit immensely from the feedback and perspectives of other clinician-teachers. I also benefit by experimenting with innovative teaching strategies. Trying new methods allows me to discover what may or may not be an effective teaching strategy, and modify my teaching practice accordingly. An ancillary benefit is that disseminating my findings may provide useful information to others also striving to be excellent clinical teachers. Examples of how I have shared teaching strategies and investigated innovative ones are highlighted throughout the rest of this teaching portfolio.

SECTION 4: TEACHING ACTIVITIES AND ROLE AS TEACHER

A. Direct Teaching

1. Medical Student Education

A large part of my effort as a clinician-educator is directed towards teaching medical students. This teaching is primarily based in the clinical context; teaching students in the course of clinical rotations either during inpatient wards or in the internal medicine consult clinic (section i). I take great pride in my consistently high evaluation ratings from students starting early in my career. For the purposes of this portfolio, I note that I was unfortunately unable to obtain student ratings from between 2010 – 2012 from my prior institution, and was also unable to obtain evaluations from 2007 – 2008, my first year as an attending physician.

In addition to direct teaching in the clinical context, I have developed and evaluated special teaching activities that were operationalized within internal medicine clerkships (section ii) – these are mentioned in this section but described in detail under "Curriculum Development." Similarly, I have developed innovative advanced medical school electives in which I directly taught medical students (section iii); these are also detailed under "Curriculum Development."

Objective Structured Clinical Examinations (OSCEs) using standardized patients (SPs) are a high-fidelity assessment method focused on clinical skills. OSCEs emphasize observable and measurable behaviors that are required for patient care, and have consequently been widely adopted in medical education for clinical skills assessment. The exam simulates the clinical environment, allowing for high-fidelity observation and assessment of multiple competencies in a controlled environment. This methodology synergizes with my teaching philosophy, which emphasizes the importance of focusing on observation and feedback of low-inference learner behaviors. For this reason, I have been engaged in the OSCE program at both UCSF and the UWSOM in several capacities, described below in section iv.

Finally, I take great satisfaction in teaching medical students in the classroom setting: comments have included "Fun, interesting and helpful!" and "Stellar use of bedside exam and statistics at the same time." I have described some of these teaching activities in section v.

i. Internal medicine clerkship teaching	
Summary	*Selected comments*
• UCSF 2008 – 2009 - internal medicine clerkship - Evaluation: - Overall teaching effectiveness, n=3, scale of 1 to 5, =5	"Dr. Mookherjee was very dedicated to providing learning opportunities for the team, including the medical student." "Attending teaching was excellent!"
• UW SOM 2012-2013 - Subintern teaching - Evaluation: - Overall teaching effectiveness, scale of 1 to 6, =5.5	"Dr. Mookherjee is a stellar physician-educator. His obvious love for teaching contributes to his excellence in that he never forgets to include students in the decision-making process …. His high expectations are motivating." "His attentiveness and thoughtfulness make him an exemplary educator and role model."
• UW SOM 2013-2014 - Subintern teaching	"Dr. Mookherjee is an incredible educator. His expectations are always clear and he provided timely, constructive feedback."

- Evaluation: - Overall teaching effectiveness, scale of 1 to 6, =5.75	"Som was not only one of the best teachers I have had the honor of learning from, but a fantastic person to work with…. Overall, I will always remember how much he seemed to enjoy interacting with his patients, how well the team worked under his leadership, out conversation about medical errors and how I learned so much from it while not being made to feel bad, and appreciate his real and honest feedback."
• UWSOM 2014-2015 - 3rd and 4th year medical students - Evaluation - Overall teaching effectiveness, scale of 1 to 6, =5.5	"I greatly appreciated structured attending rounds and focusing on physical exam findings at the bedside." "Dr. Mookherjee was a lot of fun to work with. He made his expectations clear at the beginning. He led attending round teaching sessions that were enjoyable and clinically relevant. He took time to do physical exam teachings with me which were very valuable. He was very approachable and supportive throughout the rotation."
Thank you letters and full evaluations available on request. *More recent evaluations embargoed.*	

ii. Special teaching activities within clerkships
- Bedside physical examination education, 2009 - 2010: see below, under curriculum development - Quality improvement education in a longitudinal curriculum, 2009 - 2010: see below, under curriculum development

iii. Advanced fourth year electives
- Advanced physical diagnosis elective, 2009 – 2010: see below, under curriculum development - Quality improvement and patient safety elective, 2011 - 2012: see below, under curriculum development

iv. OSCE related teaching and leadership
• Preceptor: Mini-clinical performance examination, UCSF SOM – 2008 – 2011
- I observed and gave feedback to beginning third year medical students at various times over three years. Comments from the Director: "Your insights based on your extensive clinical experience helped make the teaching highly relevant and informative and all the students greatly benefited from your guidance through the process." - Thank you letter available on request.
• Trainer, standard patients for Clinical Performance Exam, UCSF SOM – 2009
- Over the course of a morning, I provided training and feedback to four standardized patients for their roles in an OSCE. Comments from the director: "We are grateful for your insights during the training process and role-play scenario. You helped make the actual patient / student encounters in the exam itself highly relevant and effective, and the program has greatly benefited from your guidance throughout this process." - Thank you letter available on request.
• Teacher, Clinical Performance Examination remediation workshop, UCSF SOM – 2009
- Over half a day, I observed and gave feedback to a group of 5 third year medical students who did not meet performance standards in their Clinical Performance exams. Comments from the director: "Your organized and practical approach of teaching these skills in a non-threatening manner was very well received. The insights you provided based on your clinical experience and recent work with the CPX helped make the teaching highly relevant and informative." - Thank you letter available on request.
• Preceptor, OSCE and Introduction to Clinical Medicine exams, UW SOM 2014-2016

- I have served as a preceptor for multiple OSCE encounters for third and fourth year medical students. I value this opportunity to give structure feedback to learners, following the principles that I described above, under "Teaching Philosophy."
• Assistant Medical Director, UW SOM OSCE Program, 2014-2016
As the Assistant Medical Director of the UW SOM OSCE program, I focused on developing means to provide optimal feedback to learners after their OSCEs, including providing brief, just-in-time training to OSCE providers to bolster their ability to provide quick, high yield feedback. I have also developed and evaluated a project for providing Video Augmented Post-OSCE Feedback (VAPO-F) which is described in greater detail below, under Educational Scholarship.
Thank you letters and full evaluations available on request. *Please see Teaching Materials for an OSCE feedback tool*

v. Formal medical student teaching activities, outside of clerkships	
• Speaker, Intersession Panel: Optimizing clerkship learning opportunities, UCSF SOM – 2009	
- This was a panel presentation for second year medical students at UCSF prior to entering clinical clerkships.	- Overall panel rating, scale of 1 to 5, = 3.82
• Preceptor: Transitional Clerkship, UCSF SOM – 2009	
- I provided mentorship to medical students transitioning from the second to the third year of medical school.	- Comments from the director: "We heard much gratitude and sighs of relief from students after working with you, and want to share with you the significant positive effect you had on our students."
• Teacher, Intersession professional development small groups, UCSF SOM – 2009 -2010	
- In 2009, I led a 2-hour small group discussion on professionalism and ethical issues in medicine. - Evaluation: scale of 1-5, = 5 (average for all small groups = 4.64)	- Comments: "Dr. Mookherjee let us talk about what was most interesting to us … but still seamlessly guided the conversation in a purposeful direction…"
- In 2010, I was asked to return to lead another professional development small group - Evaluation: scale of 1 to 5, n = 5, = 4.8 (average for all small groups = 4.66)	- Comments: "Dr. Mookherjee has a fun demeanor, and really made the class enjoyable. I felt very encouraged and more excited afterwards about our future." "Great ability to spark conversation in our small group, which is not an easy task."
• Small group leader, Coda course, UCSF SOM 2011	
- I led 14 students in small group discussion on preparation for internship - Evaluation: scale of 1 to 5, n = 14, = 4.64 (average for all small groups = 4.5)	- Comments: "Great preparation for intern year. Thanks!" "This was a valuable and entertaining small group session." "Outstanding small group! Thank you!"
• Teacher, Capstone course "You're the Teacher – Teaching Physical Examination - UW SOM 2013	
- Evaluation: scale of 1 to 5, = 4.7	- Comments: "By far the best session of capstone"
• Small group leader, Foundations of Interprofessional Practice, UWSOM 2014-2015	
- I co-led four 3-hour teaching sessions covering different aspects of interprofessional practice. These sessions required facilitating conversations between	- Comments:

about 20 learners in different professional schools, including nursing, physician assistant, and pharmacy.	"The attending physician leading our small group was AMAZING, he provided really great advice and insight. He is a serious asset to our group."
Thank you letters and full evaluations available on request.	

2. Resident Education

My early challenges in effective resident education are what drove me into a career focused on medical education. This is discussed in greater detail in my "self-assessment," but in summary, some of my early evaluations highlighted the need to work on giving effective feedback and fostering resident autonomy. My efforts to improve have been extremely successful, as the evaluations summarized below demonstrate (section i). From 2008 to 2012, my overall rating as an attending physician improved every year, starting at 7.4 on a scale of 1 to 9, and rising steadily to 8.3 the year before I returned to the UW. Similarly, my teaching skills ratings started at 3.9 on a scale of 1 to 5 in 2008 and rose to 4.8 by 2012 – a huge and significant improvement. The selected comments listed below attest to my dedication, professionalism, and teaching skill.

In the "invited talks and workshops for residents" section, I have listed presentations given and provided summaries of evaluations and attendee comments for selected talk, where available (section ii).

i. Internal medicine wards and consult resident teaching	
Summary	*Selected comments*
• UCSF 2008 – 2009 - ward attending - Overall rating of the attending physician, n=8, scale 1 to 9, = 7.4 - Teaching skills, overall, n=8, scale of 1 to 5, = 3.9	"Excellent, involved, enthusiastic attending." "Very much enjoyed the energy and enthusiasm Som brought to the job." "Dr. Mookherjee was an outstanding attending with which to work." "I have been fortunate enough to work with Dr. Mookherjee multiple times this year on wards, and it has been a true pleasure to work with him. He is an excellent clinician-educator and provides a great deal of autonomy but nicely balances that with always being available when questions arise. THANKS FOR MAKING MY EXPERIENCE SUCH A REWARDING ONE!"
• UCSF 2009 – 2010 - ward attending - Overall rating of the attending physician, n=17, scale 1 to 9, = 7.9 - Teaching skills, overall, n=17, scale of 1 to 5, = 4.5	"Fantastic to work with! This was a very positive experience." "Outstanding focus on teaching with excellent attending rounds." "His teaching sessions are highly relevant and effective, with frequent reinforcement of key points and attempts to assess for true understanding. Overall a great leader and role model." "Tons of teaching and there when we needed him. Great with team dynamic." "Dr. Mookherjee is a highly attentive attending and provides a great balance of support and autonomy."
• UCSF 2011 – 2012 - ward attending - Overall rating of the attending physician, n=15, scale 1 to 9, = 8.1 - Teaching skills, overall, n=17, scale of 1 to 5, = 4.5	"Excellent attending." "Great attending that was always available…." "It was a pleasure and real treat to work with Som…" "Great working with Dr. Mookherjee. His mixture of casualness and professionalism made for a fun, respectful, and educational experience."

• UCSF 2011 – 2012 - ward attending - Overall rating of the attending physician, n=17, scale 1 to 9, = 8.3 - Teaching skills, overall, n=17, scale of 1 to 5, = 4.8	"Dr. Mookherjee was an incredible physician-teacher who made a great effort to prepare interesting and very useful lectures for us…" "Som is an outstanding attending…He ensures that the resident is team leader and he acts as backup, always striking the delicate balance between resident autonomy and appropriate oversight…. His interactions with patients and thorough yet focused bedside rounds provided wonderful role modeling for the team. And finally, he balances a serious approach to clinical medicine with humor and joy in his work …." "I really enjoyed having Dr. Mookherjee as an attending. He is incredibly supportive and dedicated towards the housestaff …"
• UW SOM 2012 – 2015 - ward attending - Overall teaching effectiveness, n=14, scale 1 to 6, = 5.93	"Dr. Mookherjee was an outstanding attending. He got to know everyone on the team, kept rounds interesting and educational but still fun and efficient. His didactic teaching (which he gave on a near daily basis) was superb (topics included coagulopathy workups, aortic stenosis, liver failure). Bedside teaching was emphasized and done very well. I really enjoyed working with Dr. Mookherjee. He helped me to become more confident in my diagnoses and plans, improve my physical exam skills, and led by example as a great internal medicine doc." "I really enjoyed his teaching topics with physical exam – an often ignored component of clinical medicine. The way he presented this information was very easy to understand and will have a lasting impact on my clinical practice." "Great teacher, easily approachable and fun to be around. Has amazing bedside manner and patients love him." "Great to work with. Positive attitude, great teaching (very pertinent / useful), created good atmosphere on team (emphasized respect, learning, professionalism)."
Thank you letters and full evaluations available upon request.	

ii. Invited talks and workshops for residents	
• 10/3/2007 - An approach to hyponatremia o University of Washington Internal Medicine Residency Program, Resident Teaching Conference	
• 2/27/2014 - Ward attending skills: bedside rounding with the Team o University of Washington Internal Medicine Residency Chief Resident Ward Skills series	
Evaluation	*Selected comments*
- n = 4, scale 1 to 5 "Overall teaching effectiveness" = 4.5 - Full evaluations available in the Appendix	"I was very impressed by Dr. Mookherjee's approach to this topic. I appreciated how he elicited the group's questions and concerns and artfully wove the answers into his talk." "Very effective presentation! Delivery was well polished…. The session was fun, laid-back, and interactive."
• 5/1/2014 - "We should write it up" Clinical vignettes and case reports for fame and fortune. o University of Washington Internal Medicine Residency Program, Resident Teaching Conference	
Evaluation	*Selected comments*
- n = 19, 6-point scale, 1=worst, 6=best	"One of the best lectures of the year." "Incredibly useful, well prepared." "Relevant and resident oriented."

Interaction / engagement with audience: 5.89 Usefulness / practicality of content: 5.95 Overall teaching effectiveness: 5.89	"Great practical overview." "This has inspired me to work on an abstract."
• 9/25/2014 - "We should write it up" Clinical vignettes and case reports for fame and fortune. o University of Washington Internal Medicine Residency Program, Resident Teaching Conference	
Evaluation	*Selected comments*
- n = 23, 6-point scale, 1=worst, 6=best - Interaction / engagement with audience: 5.89 - Usefulness / practicality of content: 5.87 - Overall teaching effectiveness: 5.93	From the Chief Resident: "Your talk was extremely useful, relevant, fun, and easy to follow. It made the mountain of publication seem more like a big hill for all of us. Your step-by-step approach was so refreshing and has contrasted almost all of my previous publication advice in the past! Others: "Interactiveness was great, very practical info."
• 6/25/2015 - Bedside rounding and teaching. o University of Washington Internal Medicine Residency Program, Resident Teaching Conference	
Evaluation	*Selected comments*
- n = 10, 6-point scale, 1=worst, 6=best - Interaction / engagement with audience: 5.8 - Usefulness / practicality of content: 5.4 - Overall teaching effectiveness: 5.5	"Excellent format with good participation aspect…." "Very helpful tips!"
• 10/1/2015 - Bedside rounding and teaching. o University of Washington Internal Medicine Residency Program, Resident Teaching Conference	
Evaluation	*Selected comments*
- n = 10, 6-point scale, 1=worst, 6=best - Interaction / engagement with audience: 5.7 - Usefulness / practicality of content: 5.6 - Overall teaching effectiveness: 5.6	"Som is always an engaging speaker." "Clear, practical teaching points."
• 9/29/2016 – "We should write it up" Clinical vignettes and case reports for fame and fortune. o University of Washington Internal Medicine Residency Program, Resident Half-Day	
Evaluation	*Selected comments*
- n = 18, 5-point scale, 1=poor, 5= excellent - adequate time for questions: 4.71	"Very helpful, great talk! Inspired me to write up a case for SGIM."

- Usefulness / practicality of content: 4.4 - Overall quality: 4.5 - interaction with audience: 4.5	
• 9/29/2016 – "We should write it up" Clinical vignettes and case reports for fame and fortune. University of Washington Internal Medicine Residency Program, Resident Half-Day	
Evaluation	*Selected comments*
- n = not reported, 5-point scale, 1=poor, 5= excellent - adequate time for questions: 4.4 - Usefulness / practicality of content: 4.2 - Overall quality: 4.4 - interaction with audience: 4.6	"Really fun and insightful presentation as to what makes a good case report/clinical vignette." "Overall excellent presentation. I now feel much more prepared to write up a case!"
Thank you letters and full evaluations available on request. *Please see Teaching Materials for examples of workshop handouts*	

3. Faculty Development

Faculty Development has become the focal point of my career, with an emphasis on teaching methods to optimize clinical teaching. When I re-joined the UW in 2012, I accepted a position to direct the Faculty Development Program (FDP) for Hospital Medicine. My work in that role is detailed under "Curriculum Development," here I describe my direct teaching of faculty through other venues (section i) or as part of the FDP (section ii). In addition to the FDP stand-alone talks, I created a peer observation program with the assistance of my colleague Dr. Daniel Cabrera. As part of this program, we trained our colleagues in peer observation and feedback – the evaluations from these direct teaching efforts are also summarized below (section iii). These data demonstrate that I have succeeded in my effort to provide high yield and practical teaching. The evaluations are consistently high and faculty praise my teaching effectiveness throughout. Please see additional direct teaching of faculty under "Regional / National / International Recognition."

i. Local talks and workshops for faculty	
• 5/12/2009 - Education in Systems-Based Practice: The Larger Context o University of California, San Francisco, Division of Hospital Medicine Grand Rounds	
• 4/27/2011- Structured Peer Observation and Feedback to Optimize Attending Teaching o Oral Presentation at the University of California at San Francisco Medical Education Day	
• 8/27/2013 - Medicine Morbidity and Mortality Conference o Chair's Rounds, University of Washington Medical Center	
• 4/4/2014 - A workshop on workshops (It's a workshop) o University of Washington Teaching Scholars Program	
Evaluation	*Selected comments*
- n = 3 (of 12 attendees), 5-point scale - "Overall the session was taught well" = 5.0	"This was a very practical workshop on giving workshops – I walked away with some actionable things I can do to prepare for my next workshop."
• 1/16/2015 - How to do faculty development. o University of Washington GME, New Program Director and Administrator Orientation	
Evaluation	*Selected comments*

- n= 22-23 (depending on the item), 6-point scale, 1 = strongly disagree, 6 = strongly agree - "The content was relevant to my work" – 4.83 - "The presentation was of high quality" – 5.35	"Very engaging speaker. Relevant issues, inspiring." "Well organized talk." "Very strong presenter." "Thought provoking, important topics. Great key points, examples."
• 7/14/2015 - Peer observation and feedback of bedside teaching o Center for Leadership in Medical Education (CLIME) Works in Progress presentation.	
Evaluation	*Selected comments*
- n = 9, scale 1 to 5 - Overall teaching effectiveness = 4.6	"Engaging speaker and content sparked much discussion." "Great speaker."
• 1/22/2016 - How to do faculty development. o University of Washington GME, New Program Director and Administrator Orientation	
Evaluation	*Selected comments*
- n = 23, 6-point scale, 1 = strongly disagree, 6 = strongly agree "The content was relevant to my work" – 4.96 "The presentation was of high quality" – 5.17	"He was fantastic, very helpful, concrete presentation. Realistic – good action plans" "Entertaining presentation. Skills I can bring back to my department." "Hilarious speaker and very engaged. Made me reflect / think about important aspects of faculty development." "Excellent! Honest and engaging."
• 5/24/2016 - A workshop on workshops (It's a workshop) o University of Washington Teaching Scholars Program	
• 9/22/2016 - A workshop on workshops (It's a workshop) • Seattle Children's Hospital Medical Education Interest Group	
• 4/04/2017 - A workshop on workshops (It's a workshop) o University of Washington Teaching Scholars Program	
Evaluation	*Selected comments*
- n = 10, 5-point scale, 1 = strongly disagree, 5 = strongly agree "Overall, this session was well taught" – 4.9	"Excellent pacing. Good balance of lecture & active participation."
Thank you letters and full evaluations available on request. *Please see Teaching materials for examples of workshop handouts*	

ii. Hospital Medicine Faculty Development Program Talks
• 3/14/2012- Introduction to Peer Observation and Feedback
• 4/4/2013 - You can (and should?) lead a workshop, with Chris Knight and Barak Gaster
• 7/16/2013 - Best practices in bedside rounding.
• 9/18/2013, 10/8/2013 - Introduction to peer observation of teaching
• 10/9/2013 - A workshop on workshops
• 6/3/2014, 6/24/2014, 12/12/2014 - How to help your resident (or yourself) take a case report from idea to abstract to publication
• 8/12/2014, 9/11/2014 - How to use observation and feedback to strengthen teaching
• 4/9/2015 - Bedside teaching – a discussion of best practices

• 3/10/2016 - How to turn an interesting case into a clinical vignette abstract and case report publication
• 11/30/2016 - Use Peer and Learner Feedback to Improve Your Teaching

Hospital Medicine Faculty Development Program Evaluations, 2013 – 2016, 9 talks for which evaluations were available, n = 36 respondents, scale of 1 to 5	
Quality of instruction	4.8
Relevance to your faculty development needs	4.9
Organization and format	4.8
Overall rating	4.8

iii. Peer Observation Program: POP! Training 2014 - 2015
• 10/23/14, 10/30/14, 11/4/14, 11/4/14, 11/6/14, 11/13/14, 11/19/14, 1/5/15, 3/10/15
• Introduction to POP! Peer Observation Program, Co-taught with Dan Cabrera

Peer Observation Program: POP! Training Evaluations, 2014 – 2015; 30 participants	
Quality of instruction	4.8
Relevance to your faculty development needs	4.9
Organization and format	4.9
Overall rating	4.9

B. Curriculum Development

1. Medical Student Education

Effective curriculum development is at the heart of medical education. As part of my Academic Hospital Medicine fellowship, I received rigorous training in curriculum design and assessment and was able to follow through with innovative curricula in evidence based physical examination and quality improvement. To bolster my skills in medical education research, I have completed a Medical Education Research Certificate through the UW Center for Leadership and Innovation in Medical Education. I have been particularly interested in applying similar concepts and frameworks to junior and more advanced medical students, allowing me to tailor the content based on the developmental readiness of each group of students. Thus, I investigated methods to teach quality improvement and patient safety to third year students (section i) as well as fourth year students (section ii). Similarly, I developed innovations in teaching evidence-based physical examination to third year students (section iii) and fourth year students (section iv). I am proud that each project was published in a peer-reviewed venue, allow me to disseminate lessons learned to other medical educators.

i. Quality improvement and patient safety education for third year medical students
• Summary
Competence in quality improvement (QI) is a priority for medical students. We created a self-directed QI skills curriculum for medical students in a 1-year longitudinal integrated third-year clerkship. I mentored a fourth year medical student on this project, and was the faculty lead. We had two groups of four students identify a quality gap, describe existing efforts to address the gap, make quantifying measurements, and propose a QI intervention. The program was assessed with knowledge and attitude surveys and a validated tool for rating trainee QI proposals. Reaction to the curriculum was assessed by survey and focus group.
• Evaluation

We found that knowledge of QI concepts did not significantly improve with the curriculum, but there were significant improvements in attitudes toward the value of QI and confidence in QI skills. The proposals lacked sufficient analysis of interventions and evaluation plans. Reaction to the curriculum was mixed, including appreciation for the experience and frustration with finding appropriate mentorship.

- Publication

Levitt DS, Hauer KE, Poncelet A, Mookherjee S. An innovative quality improvement curriculum for third year medical students. Medical Education Online. 2012, 17: 18391.

ii. Advanced quality improvement and patient safety education for fourth year medical students

- Summary

Practicing physicians must be competent in quality improvement (QI) and patient safety (PS). Despite this need, QI and PS have yet to be fully integrated into the undergraduate medical curriculum. To address these needs, we piloted an elective in QI/PS for senior medical students. I coordinated the project with the co-authors, developed the evaluation plan, and drafted the manuscript reporting our findings.

- Evaluation

Two 2-week electives were held, with two students in the first block and four students in the second. Mean knowledge test scores improved after the elective, but this did not reach statistical significance [mean score (SD)]: before, 7.3 (1.4), versus after, 8.2 (0.4); $p = 0.19$. Improvements in confidence were seen in all aspects queried, with the improvement reaching statistical significance in six of seven questions. Three questions assessing motivation for future involvement in QI/PS had high scores pre- and post-elective that did not significantly differ. Electives such as these are needed to foster the next generation of physicians engaged in quality improvement.

- Publication

Mookherjee S, Ranji S, Neeman N, Sehgal N. An advanced quality improvement and patient safety elective. The Clinical Teacher. 2013; 10 (6):368-73.

iii. Bedside education in evidence based physical exam for third year medical students

- Summary

Evidence-based physical examination (EBPE) is an important diagnostic tool, yet the PE skills of medical students remain suboptimal. Students learn fundamental PE skills in their pre-clerkship years; during internal medicine clerkships, education in PE focuses on basic skills and examining patients with classic or unusual findings. Prior work introducing evidence-based PE to internal medicine clerkship students has required extensive faculty time and extra work by students. I sought to begin an effective evidence-based PE program which integrates into the active schedules of students and faculty.

- Evaluation

Twenty-eight pre-series surveys and eleven post-series surveys were completed. In retrospective pre- and post-assessments by students at the end of each series, there were significant increases in all aspects of confidence measured: PE skills in general, understanding the significance of findings and making management decisions based on findings. Paradoxically, students at the end of the blocks rated PE as less useful a diagnostic tool than those at the beginning.

- Comments from participants:

“Great way to get in depth teaching about the physical exam…”
“Over all great sessions. I really enjoyed the classroom learning and then direct application to patient care. One of the best sessions of medicine rotation.”
“I loved these.”
“Always appreciate the chance to go over exam findings, and Dr. Mookherjee is just a cool guy to do it with.”
“FANTASTIC LECTURE SERIES. DON’T CHANGE ANYTHING.”

"Som had amazing handouts!"
• Publication
Mookherjee S, Chou CL. Bedside Teaching of Clinical Reasoning and Evidence-Based Physical Examination. Medical Education. 2011 May; 45 (5): 519.

iv. Advanced bedside education in evidence based physical exam for fourth year medical students
• Summary
Medical school physical examination (PE) education focuses on the acquisition of skills in three domains: psychomotor (motor skills); affective (interaction with examinees), and cognitive (interpretation). We modified an existing physical exam elective to bolster learning in a fourth domain: synthesis. In the 'synthetic' domain, practicing physicians must not only recognize findings and understand their evidence-based utility, but must also make optimal management decisions based on these findings. I developed a 3-hour structured bedside rounding session to reinforce key EBPE skills, including: estimation of pre-test probability; recognition of PE findings; evidence-based estimation of post-test probability of the disease, and decision making based on this assessment. I developed the teaching and evaluation methods and drafted the manuscript.
• Evaluation
Students answered pre- and post-elective questionnaires that measured their confidence in their ability to perform EBPE, the perceived utility of PE, and the usefulness of elective activities. Clinical vignettes presenting practice choices were used to assess clinical reasoning. Three 2-week electives were offered between November 2009 and March 2010. Twenty-one students participated. Students showed increased confidence in their PE skills in general, understanding the significance of findings, and making management decisions based on findings. Most students requested that more bedside rounds be included in the elective.
• Publication
Mookherjee S, Chou CL. Bedside Teaching of Clinical Reasoning and Evidence-Based Physical Examination. Medical Education. 2011 May; 45 (5): 519.

2. Faculty Development

UW DGIM Hospital Medicine Program Faculty Development Program
• Summary
When I returned to the UW in 2012, I proposed establishing a Faculty Development Program (FDP) for our nascent Program in Hospital Medicine. I had realized that scholarly productivity and effective teaching can be challenging for academic hospitalists: few hospitalists have had training in research, project development, or teaching skills. With the support of my Division, I developed a Faculty Development Program with the broad aim of providing faculty with the skills and knowledge needed for academic success and career satisfaction. Specific goals were to create a curriculum based on systematic needs assessment, to deliver content that was well received and attended, and to periodically adjust the program to better meet the needs of faculty based on regular needs assessment. I conducted a baseline needs assessment survey of hospitalist faculty and identified areas of high need using the survey results: lack of mentorship, low confidence in ability to create a scholarly project or publish a manuscript. I wrote specific learning objectives to address the needs across all four domains and invited speakers to lead seminars to achieve the learning objectives. I evaluated each seminar by surveying attendees. I have continued this process annually. Evaluative data is shown below. Starting in 2015, I was asked to expand the FDP to include all faculty in our Division. Again, based on meeting with stakeholders throughout the Division, analyzing evaluation data and thinking creatively regarding how to

have the most impact, I have created an innovated multi-faceted program. Details of the program are available at the homepage (gim.uw.edu/fdp) and I have summarized the key elements in the graphic below. The program is under continual assessment: the clinical teaching champions aspect is under evaluation with the use of focus groups and surveys, the mentorship program will be similarly assessed, and the bootcamps and seminars are evaluated after each event.

- Evaluation – 2012 - 2014

Academic year(s)	# FDP Seminars	Total faculty	Faculty / session	Quality of Instruction	Relevance to faculty development needs	Organization and format	Overall rating for the seminar
2012 – 2014	30	228	7.6	4.8	4.7	4.7	4.8
2014 - 2015	29	218	7.5	4.8	4.7	4.7	4.8

C. Educational Scholarship

1. Medical Student Education

i. Development of an OSCE blueprint

- Summary

In this project we systematically developed an examination blueprint for UCSF's four-year SP-based OSCE clinical skills assessment program. We used a competency-based medical education framework to align the blueprint with pre-defined medical school competency milestones for each year. The goal was to produce a developmentally sequenced, longitudinal blueprint to serve as a guide in creating SP-based OSCE examinations. This blueprint supports the validity of the SP-based OSCE series, enables clinical skills examinations to be intentionally aligned with competencies, allows for progressive clinical skills assessment,

enhances provision of developmentally-sequenced feedback, and serves as the foundation for longitudinal assessment/reassessment of students. I was the primary author, and had dedicated time to work on this project from a grant from Dr. Karen Hauer (see below)
• Evaluation
We published a manuscript describing the process of developing the blueprint. It has since been cited multiple times, and was identified as a key article on competency-based medical education by MedEdWorld.
• Publication
Mookherjee S, Chang A, Boscardin CK, Hauer KE. How to develop a competency-based examination blueprint for longitudinal standardized patient clinical skills assessments. Medical Teacher. 2013;35(11):883-90

ii. Video-augmented post-OSCE feedback to improve clinical skills
• Summary
As mentioned earlier, OSCEs are a high-fidelity assessment method focused on clinical skills. OSCEs emphasize observable and measurable behaviors that are required for patient care, and have consequently been widely adopted in medical education for clinical skills assessment. Efficient, standardized and effective feedback practices are necessary to maximize the formative benefit of OSCEs. Reviewing video recordings of OSCE station performances would allow for the objective analysis of performance, identification of actions and behaviors for correction or reinforcement, and development of a plan for future improvement of clinical skills. It is necessary to develop and study post-OSCE video-augmented feedback, so that the most effective, efficient, and sustainable methods can be implemented in our program and disseminated nationally. In this 2015 study, I piloted two methods of video-augmented post-OSCE feedback: mentored and structured self-reflection. I assessed for perceived utility, sustainability, and feasibility using surveys after the feedback as well as after the subsequent OSCE.
• Evaluation
I found that while all students appreciated the opportunity to review their performance, the mentored group was more satisfied with the process and was more confident that their clinical skills actually improved.
• Publication
Mookherjee S, Strujik J, Cunningham M, Kaplan E, Coruh B. Independent and Mentored Video Review of OSCEs. The Clinical Teacher. 2018 Jan 5. Epub ahead of print

2. Resident Education

i. Systems based practice: unintended consequences of Medicare's no pay for errors rule
• Summary
Medicare's "no pay for errors" rule is designed to improve the care of Medicare patients by incentivizing hospitals to prevent designated hospital-acquired adverse events. While it is important to understand how physicians may change their practices as a result of these new reimbursement rules, it is particularly important to understand the impact on residents. The Accreditation Council for Graduate Medical Education (ACGME) has mandated that trainees achieve competency in systems-based practice. The implementation of this new Medicare rule provided the ideal conditions for a natural experiment to understand whether residents are achieving this competency. I performed a randomized trial of a brief educational intervention, seeking to determine whether more knowledge of the changes in Medicare reimbursement might lead resident physicians to provide care that sought to maximize revenue while conflicting with evidence-based guidelines. I used clinical vignettes to approximate future behavior.
• Evaluation
In most vignettes, the intervention group (informed about the rule) was less likely to select the most clinically appropriate response. Most residents were aware of the rule but not its impact and specifics. Residents

acknowledged responsibility to know Medicare documentation rules but felt poorly trained to do so. Residents educated about the Medicare's "no pay for errors" were less likely to select the most clinically appropriate responses to clinical vignettes. We learned that if these choices are implemented in practice, they have the potential for causing patient harm through unnecessary tests, procedures, and other interventions.
• Publication
Mookherjee S, Vidyarthi AR, Ranji SR, Maselli J, Wachter RM, Baron RB. Potential unintended consequences due to medicare's "no pay for errors rule"? A randomized controlled trial of an educational intervention with internal medicine residents. J Gen Intern Med; 25(10):1097-101.

ii. UCSF Hospitalist Handbook	
	• Mookherjee S, Lai C, and Rennke S (Eds). (2012) Hospitalist Handbook, Fourth Edition. San Francisco: UCSF Department of Medicine. This handbook is a detailed and complete resource for trainees in internal medicine taking care of hospitalized patients. It originated as a guide directed at housestaff at UCSF. When I joined the editorship team in 2012, it was popular well beyond UCSF. I served as the lead editor for the fourth edition of the Hospitalist Handbook. For this edition, we made major changes to the formatting of the handbook in order to rationalize structure and content. This Handbook is now available on the Agile MD platform, and remains a popular resource for medical students and residents throughout the country.

3. Faculty Development

The majority of my academic effort is now directed towards scholarly work in faculty development. As such, I have created a diversified portfolio in faculty development. Below, I briefly describe three research projects in clinical teaching (sections i – iii). I also present materials which I have created or co-created to further faculty development in medical education: two review papers (sections iv – v), three books (sections vi-viii), several book chapters (section ix – most are within the previously listed books) and other non-peer reviewed products (section x). This body of work establishes my regional and national reputation as a faculty developer.

i. Peer observation and feedback of attending rounds
• Summary
Hospitalists are increasingly responsible for educating students and housestaff in internal medicine. Because the quality of teaching is an important factor in learning, leaders in medical education have expressed concern over the rapid shift of teaching responsibilities to this new group of educators. We developed a faculty development program based on peer observation and feedback based on actual teaching practices, using structured feedback anchored in validated and observable measures of effective teaching.
• Evaluation
Twenty-two attending hospitalists participated. Confidence in giving feedback, receiving feedback, and teaching efficacy increased. Peer observation and feedback of teaching increases hospitalist confidence in several domains that are essential for optimizing teaching. The program itself was highly rated, and most participants expressed interest in continuing with the program in the future.
• Publication
Mookherjee S, Monash B, Wentworth KL, Sharpe BA. Faculty development for hospitalists: Structured peer observation of teaching. Journal of Hospital Medicine. 2014; 9(4):244-250.

ii. POP! Peer observation and feedback of bedside rounding

- Summary

Teaching during bedside rounds is an important part of the education of students and housestaff. There are many reasons to commend bedside rounding, foremost among them: patients prefer it and teachers and learners realize that it is a valuable means of learning clinical skills. However, it is challenging to teach effectively at the bedside, and there is little formal training in this skill. My previous work showed that peer observation and feedback of formal "conference-room" small-group teaching increases faculty confidence in several domains that are essential for optimizing teaching (above). In this pilot over 2014- 2015, I partnered with Dan Cabrera to evaluate a program of peer observation and feedback during bedside rounding, a setting which presents unique challenges in comparison to teaching in a structured environment away from patients. I used a literature-based framework to train hospital medicine faculty in systematic observation and feedback of their peers' bedside teaching behaviors.

- Evaluation

Participants reported constructive changes in rounds preparation, confidence in teaching, and performance of bedside teaching skills. The structured rounding tool was felt to be useful. Overall the program was valued.

- Publication

This work has been presented as a poster at the Society of Hospital Medicine national meeting and has been presented at AAMC. A manuscript is in preparation.

iii. Observation of bedside rounds for faculty development

- Summary

Bedside rounding is an ideal opportunity for attending physicians to model humanistic and clinical competencies, demonstrate clinical reasoning, assess learners, and provide clinical teaching. Balancing learner autonomy, patient care, and teaching is challenging. Understanding perceptions of key elements of bedside rounds and appreciating the impact of interruptions would inform faculty development supporting optimal bedside rounds. I observed 16 attendings and 47 learners over 112 patient encounters. I noted the length of rounds and the number of interruptions, then surveyed participants on perception of the attendings' efficacy in preparing the team for rounds and the efficiency and educational value of rounds.

- Evaluation

Learners perceived the patient-centeredness, efficiency, and educational value of rounds to be significantly higher than attendings after the same rounds. Learners rated attendings higher than attendings did themselves on learner autonomy, appropriate supervision, conferring responsibility for the care-plan to learners, and not interrupting. There was no correlation between number of interruptions and length of rounds. These findings will inform future faculty development efforts on clinical teaching.

- Publication

Mookherjee S, Cabrera D, McKinney C, Kaplan E, Robins L. Observing bedside rounds for faculty development. The Clinical Teacher. 2017; Feb 22.

iv. How to best teach physical examination to residents

- Summary

I realized that while there is widespread recognition that physical examination should be taught to residents, little is known regarding how to best teach this important competency. Therefore, I led a project to systematically review the existing literature to determine best practices.

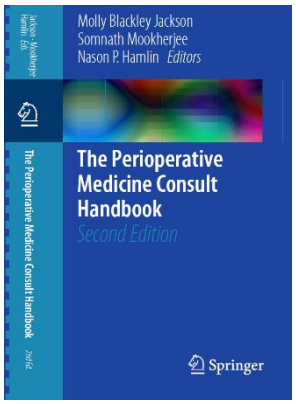
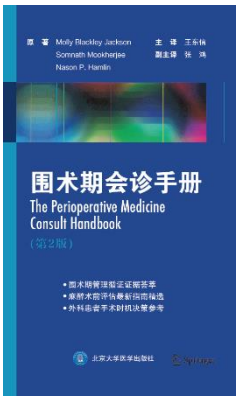
- Evaluation

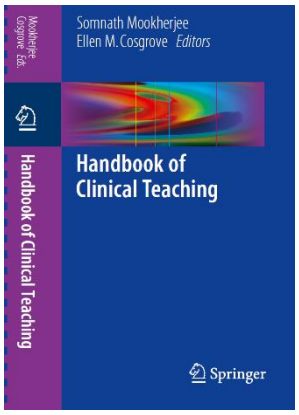
We found that no single strategy for teaching PE in GME is clearly superior to another. However, synthesizing the literature suggested that following the principles of deliberate practice and interaction with human examinees may be beneficial in teaching PE.

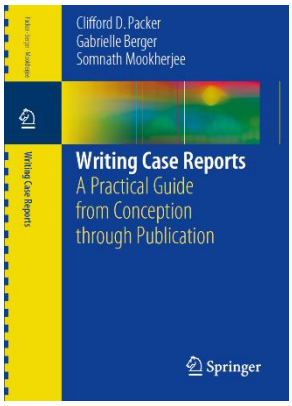
• Publication
Mookherjee S, Pheatt L, Ranji SR, Chou CL. Physical Examination Education in Graduate Medical Education – a Systematic Review of the Literature. Journal of General Internal Medicine. 2013:1-10.

v. Tips for teaching evidence-based physical examination
• Summary
This project brought together my research in investigating how to best teach evidence-based physical examination with the desire to create a systematic framework for teaching this important content. We created twelve tips that Clinician-Educators can easily operationalize in the clinical environment.
• Publication
Mookherjee S, Hunt S, Chou CL. Twelve tips for teaching evidence-based physical examination. Medical Teacher. 2014; Oct 1: 1-8.

vi. Tips for teaching quality improvement
• Summary
The purpose of this project was to synthesize lessons learned in teaching quality improvement and provide a easy to use resource for non-QI trained clinicians. I served as the mentor and senior author on this manuscript.
• Publication
Narayanan M, White A, Gallagher T, Mookherjee S. Twelve Tips for Teaching Quality Improvement and Patient Safety in the Clinical Environment. Medical Teacher. 2017 Oct 24:1-7.

vii. Perioperative Medicine Consult Handbook		
		• Jackson M, Mookherjee S, Hamlin NP (Eds). (2014) The Perioperative Medicine Consult Handbook, Second Edition. New York: Springer. I joined the editorial team for this previously-created handbook in 2013. For this edition, I led the effort for rationalization and standardization of the format and content. This edition of the handbook has been extremely popular – there have been over 89,000 chapter downloads to date and a Chinese translation has been published

viii. Handbook of Clinical Teaching	
	• Mookherjee S, Cosgrove E (Eds). (2016) The Handbook of Clinical Teaching. New York: Springer. I conceived of this handbook as a resource to provide clinical teachers – primarily practicing physicians but also other healthcare providers who teach students and residents – with a concise and practical guide for effective teaching. It provides clinical teachers with a "just in time" resource to bolster teaching skills. With the collaboration of my co-editor Dr. Cosgrove, I recruited authors with the request that they imagine that they are writing primarily for a new attending who has a few minutes to flip through a book on the way to the operating room or hospital ward. At the same time, this book is meant to be of interest to seasoned attendings to optimize their teaching. Finally, this handbook will be a valuable resource to faculty developers trying to bolster the clinical teaching skills of a larger group. The chapters are short, to the point, and provide specific instruction on teaching behaviors which are most likely to be effective. There have been over 30,000 chapter downloads, and the handbook is in Springer's top 100 books in Medicine. It serves as the basis for comprehensive faculty development at a new medical school at UNLV, where Dr. Cosgrove served as Vice Dean for Academic Affairs and Education. The book has been used as a resource for a WWAMI learning community in Montana, and is currently being translated to Arabic.

viii. Writing Case Reports - A Practical Guide from Conception through Publication	
	• Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer. This book was conceived by Dr. Clifford Packer, an internist and expert case reporter based at the Cleveland VA Hospital. He invited my colleague Dr. Gabrielle Berger and myself to join him in writing a user-friendly guide to writing case reports. Trainees and attendings alike see dozens of interesting medical cases every year and aspire to report the cases in medical journals, yet many are unable to progress from hoping to "write-up" a case to actually publishing it. This book provides an excellent resource to meet this need – giving detailed, point by point guidance on how to progress from conception to publication. The book has been well received and there have been over 4,000 chapter downloads. The book was favorably reviewed in SGIM Forum – Dr. O'Glasser stated, "I strongly recommend this book to my colleagues in academic internal medicine. Be you seasoned mentors shepherding mentees through the writing process or junior faculty seeking to build your academic portfolio and initiate mentoring relationships of your own, the case report can inspire you to stay curious and excited through your clinical work."

ix. 10 Minute Chalk-Talks: Teaching Scripts in Internal Medicine [to be published Winter, 2019]	
	• Mookherjee S, Beste L, Klein J, Wright J. 10 Minute Chalk-Talks: Teaching Scripts in Internal Medicine This is an ongoing project imbedded in the Project-Based Mentorship component of the DGIM Faculty Development Program. Nearly 100 faculty have engaged in this project, and are creating visually oriented teaching scripts while at the same time creating longitudinal mentorship relationships.

ix. Book Chapters for Faculty Development
1. Mookherjee S, Sharpe B. Teaching at the bedside. In A. Dunn (Ed) *Essentials of Hospital Medicine: A Practical Guide for Clinicians*. (2013). New Jersey: World Scientific.
2. Mookherjee S, Lima-Ferreira J. Acute Kidney Injury. In Jackson M, Mookherjee S, Hamlin NP (Eds). *The Perioperative Medicine Consult Handbook, Second Edition*. (2014). New York: Springer
3. Mookherjee S. Introduction. In Mookherjee S, Cosgrove E (Eds). The Handbook of Clinical Teaching. (2016). New York: Springer.
4. Mookherjee S. How to optimize teaching by using observation and feedback. In Mookherjee S, Cosgrove E (Eds). The Handbook of Clinical Teaching. (2016). New York: Springer.
5. Cosgrove E, **Mookherjee S**, Robins L. How to use teaching scripts to make teaching more effective and efficient. In Mookherjee S, Cosgrove E (Eds). (2016). The Handbook of Clinical Teaching. New York: Springer.
6. Stack S, **Mookherjee S**. How to teach physical examination. In Mookherjee S, Cosgrove E (Eds). (2016) The Handbook of Clinical Teaching. New York: Springer.
7. Mookherjee S, Berger G. Is my case good enough? In: Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer.
8. Mookherjee S, Berger G. How to get started. In: Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer.
9. Weiss J, **Mookherjee S**. How to write a clinical vignette abstract. In: Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer.
10. Berger G, **Mookherjee S**. Submitting a case report. In: Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer.
11. Mookherjee S, Harte B. The view from the journal. In: Packer C, Berger G, Mookherjee S. (2016) Writing Case Reports - A Practical Guide from Conception through Publication. New York: Springer.

x. Non-refereed publications and curricular products for Faculty Development
1. **Mookherjee S**, Berger G. Case reports: a "how to" guide for attendings. SGIM Forum 2015 38(6): 8-9.
2. **Mookherjee S,** Cabrera D. How to do a workshop - nine steps for the first-time workshop leader. SGIM Forum 2015 38(8): 1-3.
3. **Mookherjee S**. Center for Leadership and Innovation in Medical Education, Educator Developer Modules. Web Module: Teaching the Physical Exam in SHORT Encounters. https://canvas.uw.edu/courses/999776/pages/teaching-the-physical-exam-in-short-encounters Andros J, Abbott Klafter J, Del Bene S, Fahy A, Grob E, Higashi E, Krug M, Lenaeus M, Maxey N, **Mookherjee S**, Vogt C, White A. Video: The Ideal Round. http://isis.washington.edu/services/rounding July 2014
4. Andros J, Abbott Klafter J, Del Bene S, Fahy A, Grob E, Higashi E, Krug M, Lenaeus M, Maxey N, **Mookherjee S**, Vogt C, White A. Video: Roles and Responsibilities. http://isis.washington.edu/services/rounding July 2014
5. Stack S, **Mookherjee S**. Reviewing for Journals: The Next Step in Your Academic Career. SGIM Forum, 39(11): 12-13.

6. Fainstad T, Patton K, **Mookherjee S**. Feedback Paradigm Shift through Fostering the Growth Mindset: Time for the Teacher to Share Responsibility with the Learner. SGIM Forum – in press.

4. Research Funding

It is challenging to find the time and resources to conduct effective educational scholarship as a Clinician-Educator. Throughout my career, I have sought to support my interests with small competitive grants. In addition to providing much needed support for my efforts, receiving these grants has enhanced my reputation as a scholar and allowed me to network with many colleagues with common interests. I have listed the awards that I have received to date, and note that the first three resulted in peer-reviewed publications. I am a collaborator on the Gold Foundation project – Dr. Shobha Stack and Dr. Jennifer Best are the primary research team.

Year	Grant	Role	Notes
2010	University of California, San Francisco - Office of Medical Education Faculty Educational Research Grant	Principal Investigator	• "A Pilot Study of Structured Peer Feedback to Optimize Clinical Teaching of Hospitalists." • Collaborators: Dr. Brad Sharpe, Dr. Brad Monash • $4,548.34 distribution • Manuscript published
2011	Society of Directors of Research in Medical Education (SDRME) Invited Research Review / Synthesis Papers Grant	Principal Investigator	• "Physical Examination Education: A Synthesis of the Literature." • Collaborator: Dr. Calvin Chou • $2,000 honorarium • Manuscript published
2011	University of California, San Francisco, Haile T. Debas Academy of Medical Educators Innovations Grant	Collaborator	• "Longitudinal Clinical Skills Assessment Using Standardized Patients: Integrating the OSCE and CPX Programs" • PI: Karen Hauer, MD. • 10 % salary support 2011- 2012 • Manuscript published
2014	University of Washington Center for Leadership and Innovation in Medical Education research Grant	Principal Investigator	• "Peer Observation and Feedback of Bedside Teaching" • Collaborators: Dr. Daniel Cabrera, Dr. Christy McKinney • $4,000 distribution
2016	Arnold P. Gold Foundation Research Institute	Collaborator	• "The Professional and Personal Lives of Residents and Fellows: How does parenthood affect the trainee work environment? • PI – Shobha Stack, MD, PhD • $5,000 distribution to the PI • Manuscript submitted

5. Review Papers and Research Papers

Please see Curriculum Development and Educational Scholarship, above.

6. Case Reports

1. Armenian P, Gerona RR, Blanc PD, Wu AHB, **Mookherjee S**. 5-Oxoprolinemia Causing Elevated Anion Gap Metabolic Acidosis in the Setting of Acetaminophen Use. The Journal of Emergency Medicine. 2012;43(1):54-7. DOI: 10.1016/j.jemermed.2011.06.017
2. Gouveia C, **Mookherjee S**, Russell M. Wound Botulism Presenting as a Deep Space Neck Infection. The Laryngoscope. 2012 Dec; 122(12):2688-9. DOI: 10.1002/lary.23334
3. **Mookherjee S**, Narayanan M, Uchiyama T, Wentworth KL. Three hospital admissions in nine days to diagnose Azathioprine hypersensitivity in a patient with Crohn's disease. American Journal of Therapeutics. 2013 Jun 18. DOI: 10.1097/MJT.0b013e318296f153
4. Narayanan M, **Mookherjee S**, Spector TB, White AA. MSSA brain abscess and pyomyositis presenting as brain tumour and DVT. BMJ Case Reports. 2013;2013. DOI:10.1136/bcr-2013-009380
5. Thirumalai A, Levander XA, **Mookherjee S**, White AA. Insulinoma presenting with cardiac arrest and cardiomyopathy. BMJ Case Reports. Oct 23, 2013. DOI: 10.1136/bcr-2013-009193
6. Kulkarni HS, Chey WD, **Mookherjee S**, Saint S, Bump GB. Taking the detour. Journal of Hospital Medicine. 2015; 10 (10): 686-690. DOI: 10.1002/jhm.242
7. Deeds S, Oakes P, **Mookherjee S**, Levitt D. What are the chances? Journal of Hospital Medicine, 2017 Apr;12(4): 262-265.
8. Kara A, **Mookherjee S**, Gavin W, McDonough K. Off Target but Hitting the Mark. Journal of Hospital Medicine. In press.

SECTION 5: PROFESSIONAL DEVELOPMENT IN EDUCATION

In this section I describe my self-improvement efforts. My activities in professional development and faculty development are described in other sections of this portfolio.

Furthering my professional development as a medical educator has been a priority throughout my career. After a year as an attending physician, I joined an Academic Hospital Medicine Fellowship program at UCSF. During this fellowship, I received formal training in project design and evaluation through UCSF's Summer Training in Clinical Research course. I also completed the Stanford Faculty Development Program Clinical Teaching Seminars series which was offered over seven weeks at UCSF. As alluded to throughout this portfolio and my self-assessment, this series has been tremendously influential on my career and academic work.

While still at UCSF, I completed the Teaching Scholars Program and received training in medical education scholarship. This program enabled me to think more critically about my educational innovations, and consider how to measure more meaningful outcomes. I formed connections with other medical educators which endure to this day.

I continue to strive to improve my clinical teaching: I use my own evaluation form to solicit formative feedback from students and residents after inpatient ward rotations, and often ask colleagues for structured feedback on talks and workshops. I am also working to bolster my skills in medical education research and completed the American Association of Medical Colleges Medical Education Research Certificate course.

Finally, I had the opportunity to attend a four-day workshop on how to optimize faculty development. This conference at McGill University in Montreal, entitled "Medical Education & All That Jazz: A Focus on Faculty

Development in the Health Profession," enabled me to make important international connection with leaders in Faculty Development. I was able to discuss innovative strategies and came away with new idea to implement in my own institution.

SECTION 6: REGIONAL / NATIONAL / INTERNATIONAL RECOGNITION

Many of the activities summarized above have contributed to my growing regional and national reputation. In this section I summarize regional and national invited talks and workshops along with evaluations and selected comments, where available. I also provide a list of abstract presentations since starting as an attending physician. Finally, I provide evidence of a regional and national reputation by briefly describing committee roles and my deputy editorship with the Journal of Hospital Medicine.

A. Workshops and Talks

- 5/9/2012 - Peer Observation and Coaching to Improve Teaching - A Contrast of Two Styles and Guidance for Implementation at Your Institution, with Brad Sharpe and Brad Monash
  - SGIM 35th Annual Meeting May 9-12, 2012, Orlando, FL

- 6/17/2012 - Physical Examination Education in Graduate Medical Education – a Systematic Review of the Literature
  - Oral Presentation at the Society of Directors of Research in Medical Education (SDMRE) Summer Meeting: Annapolis, MD

- 2/2/2013 - Peer Observation and Coaching to Improve Clinical Teaching, with Andrew White and Susan Merel.
  - Northwest Regional SGIM Meeting, Portland, OR

- 10/17/2013 - Introduction to Peer Observation and Feedback
  - Medicine Grand Rounds, Boise VA Hospital: Boise, ID

Evaluation	*Selected comments*
Overall quality average score, scale of 1 to 5, = 4.8	"Excellent interaction" "Provided excellent forum for discussion."

- 10/17/2013 - Run Silent, Run Deep: Best Practices in Bedside Rounding
  - Boise VA Faculty Development, Boise, ID

- 2/7/2014 - Run Silent, Run Deep: Best Practices in Bedside Rounding, with Elizabeth Kaplan and Susan Merel
  - Northwest Regional SGIM Meeting, Seattle, WA

- 9/30/2014 - Creating Efficient Learner-Centered Teaching within Patient-Centered Care, with Kristen Hayward, MD, MS, Mollie Grow, MD, MPH, Eileen Klein, MD, MPH, Scott Smith, MD
  - University of Washington School of Medicine Faculty Development Workshop, Seattle (video-conferenced to Boise, ID)

Evaluation	*Comments*
- n = 40, 6-point scale, 1= poor, 6 = excellent "Was the content relevant to my work and / or practice" – 5.4 "Quality of presentation" – 5.7	"I really like Dr. Mookherjee's talk and plan to use the planning tool." "Fun, engaging, not too wordy. Especially Som's: loved the outline (which you could see at the bottom of the slides), humor, reinforcement…"

- 9/17/2015 - Feed-forward to Improve Clinical Skills
  - Med-Ex Northwest Faculty Development Seminar (video-conferenced throughout WWAMI)

- 9/30/2015 - Improving Teaching and Learning Behaviors: Feed-Forward and Feedback.

<table>
<tr><td colspan="2">○ UW School of Medicine - Spokane Medical Education Seminar: Spokane, WA</td></tr>
<tr><td>Evaluation</td><td>Comments</td></tr>
<tr><td>- n = 53, 5-point scale, 5 = most, 1 = least
“Advanced my competency or skill” – 4.43
“Utilized appropriate teaching methods” – 4.6
“Met the stated objectives” – 4.62</td><td>From the organizer: “I have had nothing but positive feedback today about your presentation last night. Your talk was engaging and quite useful.”
From attendees:
“Best talk on this topic I have seen!”
“Well done, useful, engaging – thank you!”
“This was an excellent session.”</td></tr>
<tr><td colspan="2">• 10/24/2015 - High Yield Teaching Pearls for Clinical Teachers
○ UW School of Medicine – Idaho WWAMI Faculty Development Workshop</td></tr>
<tr><td>Evaluation</td><td>Comments</td></tr>
<tr><td>- n = 40
- 85% rated as “excellent”
- 12.5% rates as “very good”
- 2.5% rated as “good”</td><td>“Award worthy! Loved your role modeling and humility, welcoming feedback while staying on task.”</td></tr>
<tr><td colspan="2">• 2/3/2017 - Reviewing for Journals: How to be Outstanding! With Shobha Stack (leader) and Lauren Beste
○ Northwest Regional SGIM Meeting, Portland, OR</td></tr>
<tr><td colspan="2">• 4/8/2017 - Pearls for Efficient Clinical Teaching
○ WWAMI Big Sky Faculty Development Conference, Big Sky, MT</td></tr>
<tr><td colspan="2">• 4/8/2017 - Use Peer and Learner Feedback to Improve Your Teaching
○ WWAMI Big Sky Faculty Development Conference, Big Sky, MT</td></tr>
<tr><td colspan="2">• 10/28/2017 - How to obtain high yield peer and learner feedback to improve your teaching
○ Idaho WWAMI Faculty Development Workshop: Boise, ID</td></tr>
<tr><td colspan="2">• 10/28/2017 - Tips for creating teaching scripts for efficient teaching
○ Idaho WWAMI Faculty Development Workshop: Boise, ID</td></tr>
<tr><td colspan="2">• 4/27/2018 – Practical advice for creating teaching portfolios
○ University of Washington Faculty Development Workshop: Seattle WA</td></tr>
<tr><td colspan="2">Thank you letters and full evaluations available on request.
Please see Teaching Materials for examples of workshop handouts</td></tr>
</table>

B. Abstract Presentations

1. **Mookherjee S**, Vidyarthi A, Ranji S, Wachter, Baron RB. Residents’ Awareness of and Response to Medicare’s Rule on Non-Payment for Hospital-Acquired Conditions: A Little Knowledge Can Be a Dangerous Thing. J Hosp Med. 2009; 4 (S1) A44.
- Poster presentation at the Society for Hospital Medicine Annual Meeting, Chicago, May 14 -17 2009.
- Finalist in the research poster presentation competition.

2. **Mookherjee S**, Murphy E, Chou C. Effect of Evidence Based Physical Examination Curricula for Third and Fourth Year Medical Students on Clinical Reasoning and Medical Management.
a) Poster presentation at the Dean’s Reception for UCSF Alumni week, April 8, 2009.
b) Poster presentation at the University of California at San Francisco Medical Education Day, April 27 2009.

3. Levitt D, **Mookherjee S**. Evaluating a Novel Quality Improvement Curriculum for Third Year Medical Students.
- Poster Presentation at the SGIM Regional Conference: San Francisco, CA, November19-21, 2010 (non-presenting author).

4. **Mookherjee S**, Chou C. Evidence-Based Physical Examination Rounds for Third Year Internal Medicine Clerkship Students: A Pilot Study.
- Poster presentation at the University of California at San Francisco Medical Education Day, April 12, 2010 (non-presenting author).

5. Levitt D, **Mookherjee S**. A Novel Quality Improvement Curriculum for Third Year Medical Students.
a) Poster presentation at the WGEA Regional Conference, Pacific Grove, CA, April 25-27, 2010 (non-presenting author).
b) Poster presentation at the University of California at San Francisco Medical Education Day, April 12, 2010 (non-presenting author).
c) Poster presentation at the UCSF First Annual Inter-School Research Festival, May 19, 2010 (non-presenting author).

6. **Mookherjee S**, Ley B, Capule M. The Forgotten 'P' in Mudpiles. J Hosp Med. 2010; 5 (3) (suppl 2): S165.
- Poster presentation at the Society for Hospital Medicine Annual Meeting, Washington DC, April 8, 2010.
- Finalist in the clinical vignette poster presentation competition.

7. **Mookherjee S**, Chou C. Teaching Clinical Reasoning and Evidence-Based Physical Examination at the Bedside: A Pilot Study. Journal of General Internal Medicine. October 2011, Volume 26, Issue 10, pp 1233.
a) Poster Presentation at the SGIM Regional Conference: San Francisco, CA, November 19-21, 2010.
b) Poster Presentation at the SGIM National Conference: Phoenix, AZ, May 4-7, 2011.

8. Levitt D, **Mookherjee S**. Challenges in Teaching Quality Improvement Skills to Third Year Medical Students: Feasibility and Lessons Learned. Journal of General Internal Medicine. October 2011, Volume 26, Issue 10, pp 1233
a) Poster presentation at the University of California at San Francisco Medical Education Day, April 25, 2011.
b) Poster Presentation at the SGIM National Conference: Phoenix, AZ, May 4-7, 2011.

9. **Mookherjee S**, Pheatt L, MA; Chou CL, MD, PhD. Physical Examination Teaching: A Systematic Review of the Literature. Journal of General Internal Medicine. October 2011, Volume 26, Issue 10, pp 1225.
a) Poster Presentation at the University of California at San Francisco Medical Education Day, April 25, 2011.
b) Poster Presentation at the SGIM National Conference: Phoenix, AZ, May 4-7, 2011.
c) Poster presentation at the WGEA Regional Conference, Stanford School of Medicine, CA, April 30 – May 3, 2011 (non-presenting author).

10. **Mookherjee S**, Chang A, Boscardin C, Hauer K. An Integrated, Competency-based Blueprint to Align Standardized Patient Based Assessments Across Four Years of Medical School.
- Poster Presentation at the University of California at San Francisco Medical Education Day, April 27, 2012.

11. Shoeb M, Wlodarczyk S, **Mookherjee S**. True, True – RELATED: An Unusual Cause of Bowel Obstruction.
- Accepted for poster presentation, not presented. SGIM 35th Annual Meeting May 9-12, 2012.

12. **Mookherjee S**, Monash B, Sharpe B. Structured Peer Observation and Feedback to Optimize Attending Teaching.
- Poster presentation, SGIM 35th Annual Meeting May 9-12, 2012.

13. Gouveia C, **Mookherjee S**, Russell M. Wound Botulism Presenting as a Deep Space Neck Infection.
- Poster presentation, Combined Otolaryngology Spring Meetings: April 18-22, 2012. San Diego CA. (non-presenting author).

14. Hoffman A, Chiang J, Miller S, Cunningham G, Babik J, **Mookherjee S**. More Than Meets the Eye: A Case of Disseminated Nocardia.
- Poster Presentation at the SGIM Regional Conference: San Francisco, CA, January 12, 2012 (non-presenting author).

15. Chen TC, **Mookherjee S**, Merel SE. Effectiveness and Perceived Usefulness of On-line, Cased Based Modules for "Resident Uncovered" Hospitalists Teaching Subinterns.

- Poster presentation at Northwest Regional SGIM Meeting, Seattle; February 7th 2014 (non-presenting author).
16. Arnett D, **Mookherjee S**. Hemolysis: A Harbinger of Malignancy. - Poster presentation at Washington State ACP, Seattle; November 6-8, 2014 (non-presenting author).
17. **Mookherjee S**, McKinney C, Gallagher T. A systematic Faculty Development Approach for a Newly Formed Program in Hospital Medicine. - Poster presentation at SGIM National Meeting: Toronto, ON, April 22-25, 2015.
18. **Mookherjee S**, Cabrera D, McKinney C, Robins R. Don't interrupt!? An Observational Study to Inform Faculty Development on Bedside Rounding and Teaching. a) Poster presentation at the Society of Hospital Medicine's Annual Meeting, March 6-9, 2016 at San Diego Convention Center in San Diego, CA. b) Poster presentation at Association of American Medical Colleges, Seattle WA, Nov 11-15 2016 (poster accepted)
19. **Mookherjee S**, Cabrera D, McKinney C. Structured Peer Observation of Bedside Rounds is Valuable to Hospitalists. a) Poster presentation at the Society of Hospital Medicine's Annual Meeting, March 6-9, 2016 at San Diego Convention Center in San Diego, CA. b) Poster presentation at Association of American Medical Colleges, Seattle WA, Nov 11-15 2016
10. Stack SW, Ball AB, **Mookherjee S**, Eurich K, Colon PJ, Best JB. Exploring the boundaries of the professional and personal lives of residents: A Scoping Review Protocol. - Poster presentation at National Mapping the Landscape, Journeying Together Symposium of the Arnold P Gold Foundation, May 7, 2017, Chicago, IL. (non-presenting author).

C. Editorial Responsibilities and Committee Roles

I am a Deputy Editor for the Journal of Hospital Medicine. In addition to guiding the overall direction of the journal alongside the rest of the editorial board, I am tasked with running the popular Clinical Care Conundrum series. In these articles, clinical cases are revealed in a stepwise fashion, with an expert discussant opining on the case and offering recommendations. For several reasons, I consider this role to be a core component of my development as a Clinician-Educator. First, it has enabled me to develop and fine tune my editing skills. Second, I have had many natural opportunities for mentoring as a result of this position – I have encouraged and guided several colleagues in reviewing manuscripts in addition to offering guidance to those writing case reports for the first time. Finally, the role has allowed me to meet and collaborate with similarly minded Clinician-Educators throughout the country.

I am also an Associate Editor for the SGIM Forum, a companion to the peer reviewed Journal of General Internal Medicine. In this role, I am able to help raise the profile of junior colleagues by helping them to write perspective pieces on topics that they are interested in.

I have served on university committees that have regional implications related to the WWAMI mission. I previously served on the School of Medicine Assessment Committee and the School of Medicine Regional Faculty Development Task Force. I am actively engaged with the Center for Leadership and Innovation in Medical Education (CLIME) Faculty Development Task Force and am one of the core leaders for Faculty Development in CLIME. I was honored to be asked serve as Co-Chair of the Assessment Committee for the Society of General Internal Medicine 2017 National Meeting and I am serving as the Assessment Committee Chair for the 2018 meeting. I am also an active participant in the SGIM Academic Hospitalist Task force.

SECTION 7: MENTORING

Mentoring junior faculty is an expanding component of my role as a Clinician-Educator. I regularly offer peer review opportunities to colleagues and offer feedback and guidance on their reviews. Whenever possible, I share writing opportunities with my colleagues – examples are given in the table below.

Mentee	Position	Nature of mentorship
David Levitt, MD	Currently an Attending Physician, was a fourth year medical student at UCSF at the time of mentorship.	- Project mentorship – design, execution, and publication of a longitudinal QI / PS curriculum.
Shobha Stack, MD, PhD	Attending Physician at UWMC	- Career mentorship - Writing mentor, including book chapters and journal articles - Workshop presentation mentor
Maya Narayanan, MD	Attending Physician at UWMC	- Writing mentor, journal articles
Joanna Lima-Ferreira, MD	Attending Physician at UWMC	- Writing mentor, book chapter
Gaby Berger, MD	Attending Physician at UWMC	- Writing mentor, book chapter, journal article
Daniel Cabrera, MD	Attending Physician at HMC	- Writing mentor, book chapter, journal article
Tyra Fainstad, MD	Attending Physician at HMC	- Writing mentor, journal articles
Mara Bann, MD	Attending Physician at HMC	- Writing mentor, journal articles

SECTION 8: EDUCATIONAL ADMINISTRATION AND LEADERSHIP

Effective leadership in academic medicine is motivated by a desire to improve the lives of our patients. In my divisional faculty development role, I have the opportunity to positively influence the careers of over 200 faculty. In turn, our faculty impact hundreds of future physicians and the thousands of patients that they care for and will care for in the future. My primary goal is to create sustainable, enduring programs that support career satisfaction and success for all the faculty in my Division. In doing so, I hope to foster a culture of community around both teaching excellence and scholarly work. I believe that supporting satisfied and successful faculty will ultimately contribute to the health and happiness of our patients.

I am also very engaged in the activities of the Center for Leadership and Innovation in Medical Education (CLIME). I serve as co-leader for the Faculty Development Core where we are developing new initiatives to provide faculty development throughout the WWAMI region, with an emphasis on clinical teaching.

SECTION 9: LONG-TERM GOALS

I have two major goals which I wish to accomplish within the next 5-10 years.

My first goal is to continue to investigate best methods in faculty development and create a nationally recognized model for faculty development that provides the clinical, educational, and research skills needed for academic success and career satisfaction. While I have created and organized extensively around faculty development, it is time to systematize my faculty development enterprise into a generalizable framework. I am very excited to meet this challenge in the years ahead – it will give me an opportunity to creatively synthesize my work and experience into a product that makes an enduring contribution.

My second goal is to stay anchored in what motivated me to become an academician in the first place: to become an excellent teacher and mentor for learners. I plan to prioritize direct teaching of students and residents. Rather than passing on teaching opportunities, I plan to enthusiastically take them even when time is limited. Investigating best practices in teaching and teaching others about teaching is enormously satisfying, but ultimately, active and consistent engagement in direct teaching and mentoring of trainees must remain the core of my professional identity.

SECTION 10: TEACHING MATERIALS

Example 1: OSCE Feedback Tool

2015 Senior OSCE - feedback guidelines for clinical observers – FIVE TIPS and FIVE STEPS

FIVE TIPS 1. Don't just focus on the checklist items 2. Give feedback on physicianship based on your experience and expertise	3. Observe for "low inference behaviors" – words and actions that were positive or negative 4. Write down specific examples as you observe 5. LIMIT the constructive feedback – no more than 2-3 points

FIVE STEPS	NOTES
1. <u>Elicit self-assessment - positive</u> *"What did you do well?"*	• Students tend to quickly jump to critiquing their performance – remind them that "you did a ton of things really well; let's talk more about those things" • Students tend to quickly stop saying good things about themselves – encourage them to keep listing things that they did well • Write down what they report for later reference • At the same time, take notes on what you think they did well
2. <u>Elicit self-assessment – constructive</u> *"What would you do differently next time or in a real patient care situation?"*	• Take notes on what they feel they should do differently next time. • Try to limit students to naming 2-3 things then segue to step 3 • Make sure the focus is on what they **did during the encounter** – "Next time I'm going to introduce myself" is higher yield than "Next time I'm going to study harder"
3. <u>Validate and supplement reinforcing feedback</u> *"I think you did a lot more things really well than you think you did...."* *"I agree with all the things that you said and more...."*	• List the student's specific points and reinforce them • If you disagree with one of their perceptions (this would be rare), explain why and give a specific example • List and explain any additional reinforcing feedback • There is no limit to the amount of reinforcing feedback you can give
4. <u>Give specific constructive feedback</u> *"Now I'm going to give you some specific constructive feedback."*	• **Maximum** of three pieces of constructive feedback • Acknowledge and repeat the points that the student made on self-critique – **sometimes this is sufficient constructive feedback** • If you do give additional feedback, use specific examples of what you saw • Example of well-constructed feedback: "I didn't hear an expression of sympathy when the patient said her husband died" • Example of poorly constructed feedback: "You weren't very empathetic"
5. <u>Make sure it makes sense</u> *"Does this feedback seem helpful to you?"*	• Check-in with the student and make sure the feedback makes sense • Encourage them to consider one behavior they will do differently next time

Example 2: Workshop Handout

How to turn an interesting case into a clinical vignette abstract and case report publication **Somnath Mookherjee, MD**	
OBJECTIVES • Use 5 questions to assess whether your case is worth the time and effort • Practice key steps in preparing a clinical vignette abstract • Pick a venue and format for submitting your case for publication	KEY TAKE HOME POINTS • Get consent • Establish authorship • Set deadlines • Edit to tell the story • Consider specialty journals
Case 1).	Case 2).
1. Diagnosis? 2. Strange, rare or uncommon presentation? 3. Important clinical issue? 4. Diagnostic, therapeutic, or management dilemma? 5. Important teaching point?	1. Diagnosis? 2. Strange, rare or uncommon presentation? 3. Important clinical issue? 4. Diagnostic, therapeutic, or management dilemma? 5. Important teaching point?
Don't forget to get _____!!!!	
Data / images:	Data / images:
Team: 1: 2: 3:	Team: 1: 2: 3:
Upcoming meeting deadlines 1. SHM 2. ACP 3. SGIM	Upcoming meeting deadlines 1. SHM 2. ACP 3. SGIM
Literature review: A. To our knowledge … B. Important search: C. Important search: D. Important search:	Literature review: A. To our knowledge … B. Important search: C. Important search: D. Important search:
Just tell the story …	Just tell the story …
Images, vignette, or clinical reasoning? Discussant?	Images, vignette, or clinical reasoning? Discussant?
Journals?	Journals?

Example 3: Workshop Handout

How to do a workshop: a workshop on workshops

Somnath Mookherjee, MD

Step	*Considerations*	*Notes*
1: Define a topic	• What are you good at? • What are you interested in? • What do you want to build a reputation in? • What synergizes with other scholarly work (posters, book chapters, studies, review articles)? • Unique / specialized patient population • Teaching opportunities and innovations	POSSIBLE TOPICS:
1: Identify a target audience	• Teachers • Medical education leadership • Clinicians	AUDIENCE:
1: Broad goals	• "To improve quality improvement education for medical students on the wards." • "To improve the care of inpatients with diabetes"	GOAL IDEAS:
2: Needs assessment	• Survey: formal / informal • Existing data – learner evaluations, AAMC national exit survey • Call some friends	NEEDS ASSESSMENT IDEAS:
3: * Objectives *	• "By the end of this session, participants will be able to…" • Emphasize application in real life • Ideally, NOT a description of what you or participants will be doing during the workshop	OBJECTIVES IDEAS:
4: Recruit faculty	• Active vs. limited role • Other institutions • Other specialties	POSSIBLE FACULTY:

Based on: Steinert Y, Boillat M, Meterissian S, Liben S, McLeod PJ. Developing successful workshops: a workshop for educators. Medical teacher. 2008;30(3):328-30.

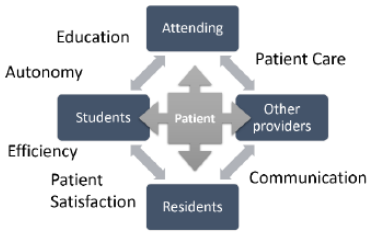
5: Brainstorm	• Maximize engagement • Know your audience – don't be annoying	DURING THE SESSION, PARTICIPANTS WILL:
6: * Detailed agenda *	• Align agenda with powerpoint slides • Allocate time – test later • Decide who talks and what they say • Prepare for variation in group size • Engage audience so objectives are relevant • Write down key sentences – you may forget unless you practice • **Precise** instructions for what people are supposed to be doing • Transition slides • Too little content is better than too much	
7: Practice	• "Winging it" never works • Your colleagues cannot read your mind • Everyone needs to know what their role is, what they are supposed to say and for how long	
8: Logistics	• Who is providing AV? • Handouts? • Sign-in sheets? • Laser pointer? • Back-up computer, speakers	
9: Evaluation	• Aligned with learning objectives • "Reaction" • Knowledge • Skills • Attitudes	

#	Time Spent	Leader / Discussant	Content	Objectives addressed

Based on: Steinert Y, Boillat M, Meterissian S, Liben S, McLeod PJ. Developing successful workshops: a workshop for educators. Medical teacher. 2008;30(3):328-30.

Example 4: Workshop Handout

Bedside Rounds



Definition: Interacting with patients, learners, ± other professionals in the patient's room. Trying to be efficient, educational, and optimizing both patient care and learner autonomy.

Remember your biggest bedside rounding DISASTER?

What did you do that contributed to the DISASTER?

Check-off items on the checklist that might have helped avert DISASTER.

Write down one new strategy you will use next time you round at the bedside:

	Important Checklist Items	*How to Operationalize*
PLAN TO SUCCEED	☐ Establish goals with the team prior to first bedside rounds ☐ Define roles and responsibilities ☐ Define structure and content of presentation ☐ Establish plan for debriefing and feedback	• *Interns / Residents / Medical Students are the bedside leaders.* • *Resident is the team leader.* • *X minute presentations* • *Plan of care will be clear by the end.* • *Attending will defer to the Resident whenever possible.* • *Attending is ultimately responsible for teaching and patient care.*
ORIENT THE PATIENT	☐ Introductions ☐ Goals and structure explained to the patient ☐ Additional goals elicited from the patient	• *The Intern / Resident / Medical Student will say:* • *"I am going to formally present your case to the team."* • *"We will do a brief exam and summarize the plan."* • *"Our Attending may modify the plan or make a teaching point."* • *"Please write down your questions as they come up so we can address them all at the end."* • *"We'll be here for about 10 minutes – we will return to address anything we don't have time for now."* • *"Is this OK with you? Any questions?"*
STICK TO THE PLAN!	☐ Follow pre-arranged structure ☐ Maintain patient respect ☐ Maintain learner respect	• *Don't interrupt!* • *Take a step back.* • *Write down observations / questions / changes in plan.* • *Save all comments for the end.* • *Ask patient permission before demonstrating or teaching.* • *No more than 2 teaching points per patient on rounds.*
DEBRIEF	☐ Elicit feedback ☐ Provide specific behavioral feedback	• *Attending will ask,* • *"What do you want to keep doing?"* • *"What do you want to do differently?"*

Example 5: Workshop Handout

Mookherjee – Boise WWAMI Faculty Development – October 2017

	**Positive learning climate**	Showed interest through body language. Encouraged learners to participate actively in the discussion.
	**Control of session**	Called attention to time.
	**Communicating goals**	Stated goals clearly and concisely. Stated relevance of goals to learners.
	**Promoting understanding and retention**	Presented well organized material. Cued important teaching points / take-home points.
	**Evaluating learners**	Evaluated learners through observation or questioning.
	**Providing feedback**	Explained to learners why they were correct or incorrect.
	**Promoting self-directed learning**	Motivated learners to learn on their own.

Based on: Skeff KM, Stratos GA, Bergen MR, et al. The Stanford faculty development program: A dissemination approach to faculty development for medical teachers. Teaching and Learning in Medicine: An International Journal. 1992; 4(3):180 – 187

Example 6: Workshop Handout

Mookherjee – Boise WWAMI Faculty Development – October 2017

Example 7: Workshop handout (condensed)

Think about a time that you taught a patient about their disease or management of their disease.	
1. What was the topic?	2. What was effective?

What is a teaching script?	
Helps you:	Efficient "clinical" teaching script:
• **P**lan for effective teaching • **O**rganize for efficiency • **P**rioritize key concepts	• Key points > expertise • Concepts > details or statistics • Practical teaching > theory

Anatomy of a teaching script
• Objectives / key points
• Trigger / vignette
• Curated content
• Strategies

Make a list of 5 topics / clinical scenarios that would be great for a teaching script in your practice.
Common scenarios / decision points - High risk scenarios - Confusing situations
1. 2. 3. 4. 5.
Pick one topic that sounds like the most fun for you to teach (and that you know something about).

Tips for creating teaching scripts for efficient teaching – Mookherjee – October 2017

Put it together – circle key points – asterisk where you could put a good question

Tips for creating teaching scripts for efficient teaching – Mookherjee – October 2017

Typical presentation
Age – gender – risk factors

Key content	
Typical history	Key labs
Physical exam findings	Distinguishing features

What are the two key, must not miss, really important points that must be remembered?
1. 2.