Teaching portfolio: Joseph O. Merrill MD MPH

Executive Summary

I have been involved with influential teaching programs for medical students, internal medicine residents, and practicing physicians at the local, regional and national levels. My educational expertise cuts across areas of national importance related to undergraduate medical education, telemedicine, integration of addiction medicine into primary care, the opioid epidemic, and management of chronic pain. As such, my professional homes and associated learning communities are diverse, yet my contributions to these communities form an integrated whole that speaks to and educates a wide range of stake holders and positions me well to take on new educational and administrative leadership opportunities.

Within undergraduate medical education, my main role has been as a UWSOM College Faculty member, with contributions to the medical school curricula and the transition to the new UWSOM curriculum. I have been primary mentor for 5-7 medical students per year for the last 10 years, teaching clinical medicine at the bedside and in small groups, and mentoring students through their four year medical student careers. I have been especially active in Professionalism and Communications curriculum development, as well as collaborating in the development of the behavior change curriculum in the new curriculum. No experience has better connected me to the crux of the values underlying medical practice than my interactions with the College faculty community and early medicals students seeking to develop their own values within medicine.

In the area of resident teaching, I have been consistently active in both inpatient and outpatient primary care teaching at Harborview since 1998, with associated ward attending rounds and pre-clinic conferences. In addition, I have led multiple addiction medicine related teaching initiatives, including chief medical resident projects in addiction medicine education, field trips to addiction sites, and faculty leadership of the Addiction Medicine elective block for internal medicine residents. This popular elective has provided didactic teaching, clinical observation, and one-on-one teaching to residents since 2009. Teaching residents as they seek readiness for independent practice through a grueling residency has always challenged me to maintain and model the kind of medical practice every patient deserves.

Educational activities for practicing physicians has been an active area, as I have been an invited lecturer or course director for scores of regional and national CME, CNE, and buprenorphine waiver training courses. These activities have led to my participation in multiple federal efforts, most recently NIDA and CDC national curriculum development in addiction education and pain management education. In addition, I have been active in telemedicine education, participating as an expert panel member in Project ECHO and related weekly telemedicine program in hepatitis C treatment, chronic pain management, and opioid addiction treatment. With participants across the Pacific Northwest, I led Project ROAM, a telemedicine program supporting regional physicians in their early adoption of buprenorphine prescribing, an effort leading to national award from SAMHSA in 2012. Currently I lead the UW hub of the HRSA-funded Opioid Addiction Treatment ECHO program, providing support for primary care clinics across the country in their efforts to improve access to medication assisted treatment of opioid use disorders. As part of this project, I collaborate in the development of a national curriculum on opioid addiction treatment.

One thing I have learned from my patients with addictive disorders is that recovery can never be complacent, but must always move a person forward in their story and values. This is true of careers in medicine, with burnout or boredom replacing relapse as the path to despair. My ongoing "recovery" activities relate to taking on new leadership roles in the expansion of addiction treatment services statewide and within primary care, development of an inpatient addiction consultation service at Harborview, and initiation of a UW Addiction Medicine Fellowship program, with ACGME accreditation planned for 2018. All these initiatives are essentially teaching exercises at one level or another, giving me confidence that my career path of clinician educator is right and true.

Table of Contents

I. Personal Information

1. Joseph O. Merrill MD MPH
University of Washington School of Medicine
Harborview Medical Center
325 Ninth Avenue – Box 359780
Seattle, WA 98104
Office: 206-744-1834
Fax: 206-744-1834
Email: joem@uw.edu
2. Associate Professor of Medicine
3. General internal medicine, primary care, addiction medicine, chronic pain management, HIV medicine
4. Institutional affiliation: University of Washington School of Medicine, Harborview Medical Center, Alcohol and Drug Abuse Institute.
5. Includes a summary of my teaching work since joining the UW faculty in 1998.
6. Short work-history: After attending medical school at Yale University, I did my residency in primary care internal medicine at the University of California, San Francisco/San Francisco General Hospital. I spent three years after residency at SFGH in the AIDS program and General Medicine Clinic. There I provided HIV care and hospice treatment to patients in the SFGH methadone maintenance program and developed an interest in addiction medicine. I pursued this interest through the Robert Wood Johnson Clinical Scholars Program at the University of Washington. Since this fellowship, I have been on the UW faculty in the department of medicine.

II. Teaching Philosophy

Teaching and learning in medicine center on core human values and communications skills that can be taught and learned best in an environment of mutual respect between teachers and learners, where honest and constructive feedback can be provided in both directions, and learners have autonomy in their choice of areas of focus and approach. Since I see the role of the physician as primarily a teacher of patients, this philosophy applies as much to my interactions with patients as with medical students, residents, and practicing physicians. The core values of integrity and a search for meaning and purpose in human interactions are the same, whether it is a student learning medicine or a patient seeking healing.

Communications skills are often overlooked as central to the doctor-patient and teacher-learner relationships, in part because we have a limited vocabulary for describing them. What does being a good communicator really mean? Certainly curiosity is central, but it must be a curiosity that communicates caring about the individual, not just as a means to collect data, but wonder about the stories and values at the core of the patient or learner. When I watch a student interviewing a patient, I focus on how they communicate that kind of curiosity with their body, their face and eyes, as well as their words. I want them to identify when a patient says something with emotional content and ask more about that, as I know those fleeting comments are often the key to the life story that allows effective care for the patient. And why would the patient share that central nugget with a doctor, or why would a student share that nugget with a teacher, unless it is clear that the doctor/teacher wants to know, is trustworthy, and is open to hearing the back story, however traumatic or burdened?

Clarity in communications is also essential to teaching students, treating patients, or creating community. When I applied to continue on the UWSOM College faculty in 2014, we were all informed that due to changes in the curriculum structure, there were not enough College faculty positions for everyone in Seattle to continue, and even those continuing would have "term limits," eventually giving up their position so that young faculty could benefit from this remarkable opportunity. For me, the College faculty experience has been a central guiding and nurturing influence in my evolution as a physician and teacher and person. It has also been the occasion for a renewal of my vows as physicians, for we are faced with the undifferentiated student and task of communicating no less than the fundamental values of medicine. Facing the disruption of our community and the possibility of leaving it was heartbreaking, to say the least, but the clarity of communication and the underlying values behind the changes were impeccable. As I look towards leadership roles in medical education, I hope to emulate this style.

I recently reviewed the material submitted when I initially applied for a UWSOM College Faculty position in 2006. My teaching philosophy statement described a "difficult case" of a Harborview inpatient ward team in crisis when I took over as attending physician. Each team member faced their own specific and daunting challenges, and it required all my communication skills and teaching values to respond effectively. I have always been one to gravitate towards "difficult cases" in clinical medicine, especially as they involve the social determinants of health, stigma, and multiple medical, mental health, social and addiction issues. This ward team required the same approach as the patients I treat. I wrote: "My philosophy of education was put to its paces this month as it shaped a path towards reformulating our team structure for safe care and optimal learning. However, I hope that we were also able to find resilience, energy and meaning through a pointed focus on the plight of the Harborview patients under our care. The values that guide my teaching relationships with the medical team – respect for individual goals and interests, communicating with sensitivity and directness, and providing opportunities for success – are also ones I hope to model in interactions with patients. To actively and creatively put ourselves in the presence of patients' suffering and emerge as allies for the most marginalized is a primary gift available in this place, and if even only a glimpse of this magic is seen, my philosophy has served its main purpose."

III. Teaching activities and role as an educator

1. Direct teaching:

Clinical Teaching Activities: Medical Students

2000 – 2012 HuBio 550. Introduction to Clinical Medicine. Led annual Substance Abuse session (one afternoon) for second year medical students. Many of these sessions involved a panel or role play in order to emphasize the communication skills needed to interact around addiction issues, including overcoming stigma.

2007 – present UW School of Medicine Colleges. I was a faculty member of the Snake River College from 2007 through 2015, and when the Colleges were re-organized, I was selected to continue as an Olympic College Faculty Member (2015-present). As College Faculty members, 25% of our time has been dedicated to teaching pre-clinical medical students in the Introduction to Clinical Medicine (ICM-2) course and, more recently, the Foundations of Clinical Medicine (FCM) course. Each year, we are assigned 5-7 medical students to mentor through their four-year career, getting to know them well during their pre-clinical years. Usual duties in the current system include one full morning weekly (fall term) or every other week (winter/spring term) with students in hospital bedside teaching and a second half day in small group teaching activities. Each faculty member attends All Colleges and Snake River/Olympic College meetings, assists in the development of teaching materials for small group FCM sessions, delivers the FCM curriculum to students in small group settings, and provides detailed individual feedback on student clinical skills (history and physical exam, oral case presentations, documentation). College faculty regularly share student stories and struggles, creating a true learning community as well as providing key personal and professional support to each other. I have been especially involved with developing and refining the Communications and Professionalism curriculum in ICM-2 and the addiction and behavior change modules used in the FCM course.

Clinical Teaching Activities: Residents

1998 – present Harborview Adult Medicine Clinic Resident Preceptor. I supervise medicine residents in their primary care continuity clinic one-half day weekly. Also involves weekly Pre-Clinic Conference on primary care topics.

1998 – present Harborview Medical Center Medical Service Ward Attending. I supervise an inpatient medicine team at HMC four weeks yearly. This involves third and fourth year medical student and resident education at the bedside and at Attending Rounds, which occur at least three times weekly.

2004 – present Faculty Mentor for HMC Adult Medicine Clinic Chief Residents attending the Chief Resident Immersion Training Program, a week-long training in addiction medicine. I have assisted in follow up action plan for teaching substance abuse issues during Chief year. I have mentored residents most years since 2004, though with the development of additional Adult Medicine Clinic faculty interested in addiction medicine, those faculty have begun mentoring residents as well. An example project initiated through this mechanism was initial development of an Addiction Medicine elective in 2009 (see below).

2005 – 2013 Harborview Adult Medicine Clinic / UW Internal Medicine Residency Core Curriculum on Pain Management. Handout revised annually, presented through pre-clinic conferences daily for 1-3 weeks yearly.

2005 – present Internal Medicine Residency Patients, Physicians, and Society Conference (previously Behavioral Medicine Conference). I lead twice yearly (or more) visits to Evergreen Treatment Services

so residents can learn about methadone maintenance treatment. This has been one of the most popular trips, so has been continued now for more than a decade.

2007 – present Faculty mentor for Harborview Adult Medicine Clinic / Internal Medicine Resident Journal Club. This involves working annually with a medicine resident to review a journal article, develop a handout, and present at one of the monthly AMC journal club sessions.

2009 – present Internal Medicine Residency Addiction Medicine Elective Month faculty sponsor. This elective allows exposure to addiction treatment programs at HMC and the VA as well as trips to addiction related sites in the community. The elective serves one resident per month. I am the faculty sponsor and each resident spends ½ day weekly with me seeing patients in the Harborview Addictions Program. I deliver one-on-one didactic teaching during these clinic sessions.

Clinical Teaching Activities: Practicing Physicians

Project ECHO (Extension for Community Healthcare Outcomes) is an innovative telemedicine program originally developed at the University of New Mexico that connects rural and underserved clinics to university faculty expert clinicians so that complex conditions can be treated locally. This model has been shown to improve access to care with comparable health outcomes. Project ECHO has been expanding nationally and internationally and the University of Washington was the first site of expansion outside UNM through funding from the Robert Wood Johnson Foundation. I have been participating as an expert clinician panel member in multiple UW ECHO and related projects since the UW site began in 2009. Activities include weekly 1-2 hour telemedicine sessions involving multiple clinics/clinicians connecting to a hub site where most time is spent in case presentations and discussion of appropriate care. Through this process, true learning communities develop that raise the level of care for complex diseases such as hepatitis C, HIV, chronic pain, and addiction disorders. I have personally delivered over 120 didactic lectures across these programs and consulted on thousands of patient cases.

2009 – present Project ECHO Telehealth for Hepatitis C Treatment. Weekly 1.5 hour case conferences. Role: faculty panel addiction expert. Also prepared and presented approximately monthly 10-20 minute educational presentations since 12/09 on topics in addiction and pain medicine.

2010 – 2013 Project ECHO Telehealth for Rural Opioid Addiction Management. Biweekly initially, then weekly 1 hour case conferences. Role: faculty panel conference leader. Includes monthly 10-15 minute educational talks. I earned a SAMHSA Science and Services Award for this work in 2012.

2011 – 2015 Project ECHO-UW Pain. Weekly 1.5 hour Telehealth case conferences. Role: faculty panel addiction expert. Over twenty 20-30 minute didactic talks.

2016 – present University of New Mexico Opioid Addiction Treatment ECHO program. I lead one of 6 national hubs for this program to support Federally Qualified Health Centers and other HRSA-funded primary care clinics in their efforts to treat opioid addiction. I lead twice monthly two hour telehealth sessions that began January 2017. I am also involved with the development of the national curriculum used in these ECHO sessions, leading the development of a presentation on Medication Treatment for Opioid Use Disorder.

Lecture Activities

I have been active in delivering a wide range of lectures to medical students, residents, and practicing physicians. Below is a summary of these lecture activities, followed by a table quantifying my lectures from 20010 through 2016 and a more detailed list of lectures given over the last 15 months.

Grand Rounds and Invited Lectureships

1. The Medical Care of Injection Drug Users. Medical Grand Rounds, University of Washington. 3/00.
2. Prescription Opioids: Trends, Risks, and Addiction Issues. Sacred Heart Medical Center Lectureship in Internal Medicine (Invited Lectureship). Spokane, WA, 5/11/11.
3. Washington State Pain Legislation: Creating Value Through Measurement. University of Washington Medical Grand Rounds. With Alex Cahana, Seattle, WA, 10/6/11.
4. Addiction Medicine Matters. Medical Grand Rounds, University of Washington. Seattle, WA, 9/7/17.

Buprenorphine Training Programs

Faculty member for 18 buprenorphine/naloxone training programs (2001-2017) across the country, sponsored by the American Society of Addiction Medicine, the American Academy of Addiction Psychiatry and the American Osteopathic Academy of Addiction Medicine. These are federally approved day-long or 4-hour training programs to qualify physicians to prescribe buprenorphine for opioid addiction. I was course director for seven of these trainings and frequently led small group sessions and gave multiple lectures for each training. We provided three training programs for UW internal medicine residents (and others physicians) during the summer of 2016 and are doing so again in 2017. These are all CME-eligible training programs.

Continuing Medical Education

I have been an invited speaker for over 20 regional and national Continuing Medical Education programs from 2000-2017. I was asked to speak on topics in multiple areas in addiction medicine, pain medicine, and opioid prescribing. I have been invited over multiple years to speak at the UW Challenges of Pain Conference and the John Loeser Annual Conference, which speaks to the popularity of these lectures.

Continuing Nursing Education

I have been an invited speaker for eight University of Washington School of Nursing Continuing Nursing Education programs from 2000-2017. I was asked to speak on topics in addiction medicine, pain medicine and HIV medicine. These have been very well received, leading to my being asked to return for multiple years.

Other Presentations

I have been asked to give over 50 presentations to medical students, internal medicine residents, anesthesiology fellows, policy groups, and local community groups on addiction medicine and pain medicine in the inpatient and outpatient settings.

Summary of Lecture Activity 2010-2017

Year	Buprenorphine Training Courses	Telemedicine – Project ECHO	CME/CNE	Other Lectures
2010	2	13	3	8
2011	2	13	4	3
2012	0	17	3	7
2013	2	15	3	4
2014	0	20	3	3
2015	0	16	3	3
2016	1	18	3	3
2017*	2	15	6	3

* Includes scheduled lectures

Recent CME/CNE/Lectures (January 2016 – August 2017)

1) UW Challenges of Pain Conference. Cognitive Behavioral and Motivational Approaches to Chronic Pain. January 21, 2016. Practicing clinicians/CME.
2) UW Internal Medicine Residency Core Curriculum. Opioids in the Hospital and Unhealthy Alcohol Use. March 24, 2016. Internal medicine residents.
3) Buprenorphine 4-hour waiver training, Harborview Medical Center. July 18, 2016. Internal medicine and family medicine residents, attending physicians. Practicing clinicians/CME.
4) AIDS Clinical Conference. Update on Opioid Use Disorders. October 17, 2016. Practicing clinicians/CME.
5) UW Addiction Psychiatry Track. SAMHSA Medication Assisted Treatment – Prescription Drug and Heroin. October 26, 2016. Addiction psychiatry fellows, addiction psychiatry physicians.
6) UW Family Medicine Conference. Addiction Medicine in Primary Care. September 14, 2016. Practicing clinicians/CME.
7) Harborview Medical Center Schwartz Rounds panelist for session on the opioid epidemic. January 10, 2017. Practicing clinicians, students, residents, and HMC staff.
8) Buprenorphine 4-hour waiver training. 19th Annual Fundamentals of Addiction Medicine Conference. March 2, 2017. Practicing physicians/CME. Marysville, WA.
9) Olympic College Faculty seminar. Motivational Strategies for Mentoring. March 15, 2017. Clinician educators.
10) Harborview Medical Center Medical Executive Board. Addiction Medicine at Harborview Medical Center. April 6, 2017. Administrators, clinicians.
11) Virginia Mason CME on Opioids, Alcohol and Other Drugs in Primary Care: What Can We Do? Workshop on Tapering Chronic Opioids in Primary Care. May 12, 2017. Practicing clinicians/CME.

Recent Project ECHO Telemedicine Didactic Talks (January 2016 – August 2017) – CME-eligible

1) HCV ECHO. Motivational Strategies for Behavior Change. January 26, 2016.
2) UW TelePain. Motivational Enhancement with Goal Setting. January 27, 2016.
3) UW TelePain. Cognitive Behavioral Therapy for Chronic Pain: A Primary Care Perspective. February 17, 2016.
4) HCV ECHO. Prescription Opioid and Heroin Use. February 16, 2016.
5) HCV ECHO. Unhealthy Alcohol Use. March 15, 2016.
6) UW TelePain. Addiction Assessment. March 30, 2016.
7) HCV ECHO. CDC Opioid Prescribing Guidelines. April 5, 2016.
8) HIV Telehealth. Motivational Strategies for Behavior Change. April 21, 2016.
9) HCV ECHO. Opioid Prescribing after Non-fatal Overdose. May 3, 2016.
10) HCV ECHO. Patterns of HCV Transmission. July 12, 2016.
11) UW TelePain. Addiction Treatment. July 20, 2016.
12) HCV ECHO. Evaluation of Patients Who Inject Drugs. July 26, 2016.
13) UW TelePain. Motivational Enhancement with Goal Setting. August 3, 2016.
14) UW TelePain. Cognitive Behavioral Therapy for Chronic Pain: A Primary Care Perspective. August 17, 2016.
15) HCV ECHO. Tobacco Cessation. August 29, 2016.
16) HCV ECHO. Treatment of Opioid Use Disorders. September 20, 2016.
17) HCV ECHO. Federal Opioid Policy Update. October 18, 2016.
18) HCV ECHO. Naloxone Co-prescribing for Patients on Chronic Opioid Therapy. December 20, 2016.
19) Opioid Addiction Treatment ECHO. Overview of Opioid Use Disorder. January 23, 2017.
20) HCV ECHO. Assessing Substance Use: Which Questions Work? January 24, 2017.

21) HCV ECHO. Pro versus Con: Should Active Drinkers be Treated for HCV? February 12, 2017.
22) HCV ECHO. Benzodiazepine Use and HCV Seroconversion. March 28, 2017.
23) HCV ECHO. Unhealthy Alcohol Use. April 25, 2017.
24) Opioid Addiction Treatment ECHO. Medication Treatment of Opioid Use Disorder. April 10, 2017.
25) HCV ECHO. HCV Reinfection after SVR in HIV Co-infected Patients. June 13, 2017.
26) Opioid Addiction Treatment ECHO. Pain Management in People who have Opioid Use Disorder. June 26, 2017.
27) Opioid Addiction Treatment ECHO. Opioid Use Disorder in Special Populations (Adolescents, Pregnancy). July 10, 2017.
28) Opioid Addiction Treatment ECHO. Overview of Opioid Use Disorder. July 24, 2017.
29) HCV ECHO. Update on Opioid Addiction Treatment. August 8, 2017.
30) HCV ECHO. Adverse Childhood Experiences and Illicit Drug Use. August 22, 2017.

2. Curriculum Development

UWSOM Colleges Curriculum Development

The College faculty is tasked with delivering the content of a clinical curriculum for pre-clinical medical students that includes activities related to bedside hospital tutorials and activities related to small group teaching session, most of which cover communications themes and/or physical exam skills. The entire curriculum is documented in a series of "benchmarks" that give students clarity on the required aspects of the curriculum. There are benchmarks on communications skills, professionalism, oral case presentations, write-ups, clinical reasoning, and a series of physical exam benchmarks. This innovative curriculum was developed by the College faculty since its inception over a decade ago, and has been implemented within the Introduction to Clinical Medicine course by College faculty each year. Benchmarks are modified by College faculty workgroups and we continually share resources for curriculum implementation. Among the most popular aspects of the old UWSOM curriculum, the College system and benchmark curriculum has been a foundation for the transition to the new curriculum and the new Foundations of Clinical Medicine course.

My contribution to this large ongoing curriculum has included implementation of the curriculum each year of my College involvement, and participation in work groups looking to modify or add to the benchmarks. Both the Communications work group and the Professionalism work group have undertaken substantial modifications to those benchmarks during my tenure, and we are currently working on another iteration of the Communications benchmark that will include more flexible formatting, videos summarizing key skills, and enhanced linkages to further detail outside the benchmarks. As the new curriculum has been implemented, I have also been a leader in developing and implementing sessions that teach students about behavior change counseling skills and addiction. Sessions include Facilitating Behavior Change (2 sessions), Substance Use History, and Substance Use Disorders.

Other Curriculum Development

I have created and implemented a large number of educational curricula for residents, primarily through the Harborview Adult Medicine Clinic pre-clinic conferences, ward attending rounds, and the addiction medicine block elective. In addition, I have created curricula for all the telemedicine programs in which I have participated, as listed in above in the clinical teaching section. Below are more detailed accounts of additional curricula developed for a national audience, including two completed and three ongoing projects.

<u>Palliative Care for People with HIV/AIDS: A curriculum and teaching resource for medical educators.</u> In 2004, I collaborated on the development and implementation of The Substance Abuse Tutorial Guide: Incorporating Clinical Skills Into Clinical Practice (plus associated video). With Petracca FM, Stevens L,

Back A, Curtis JR.

UW Pain/Centers for Disease Control Division of Unintentional Injury Prevention Webinar Series 2016. In 2016, the CDC issued a new Opioid Prescribing Guideline as a public health response to the surge in overdose deaths related to prescription opioid medications. In collaboration with UW pain medicine faculty and CDC staff, I developed and delivered three of seven Webinars that were presented as Clinician Outreach and Communications Activity (COCA) calls. These were initially viewed/heard by over 1000 participants nationwide and remain available on the CDC website.

University of New Mexico Opioid Addiction Treatment ECHO. With funding from the grant entitled Expanding Treatment for Substance Use Disorders Through the ECHO Model, I lead one of 5 national hubs to support FQHCs and other HRSA funded primary care clinics in their efforts to treat opioid addiction. I lead twice monthly two hour telehealth sessions that began January 2017. I am involved with the development of the national curriculum used in these ECHO sessions.

Center of Excellence in Pain Education at the University of Washington. With funding from the National Institute on Drug Abuse, the UW has contracted to produce national curricula related to the intersection of pain management and substance use disorders. I am currently working on a web-based module on the inpatient acute pain management of patients with opioid use disorder (in development).

National HIV Curriculum. The Northwest AIDS Education and Training Center is funded to create a web-based national HIV curriculum under the leadership of Dr. David Spach. In collaboration with Rebecca Kinney, I was senior author of Lesson 7, entitled "Substance Use Disorders," within Module 2 on Basic HIV Primary Care. The lesson is finalized and the curriculum will be rolled out in the spring of 2017.

3. Educational Scholarship

Peer reviewed educational publications

Merrill JO, Sande M. Approach to the acquired immune deficiency syndrome. In Kelly WN et al. Textbook of Internal Medicine. Third Edition. J.B. Lippincott. 1997. Book chapter.

Washington State Medical Directors Group. Interagency Guideline on Opioid Dosing for Chronic Non-cancer Pain: *An educational aid to improve care and safety with opioid therapy.* 2010 Update. I was on the work group that developed and revised this influential guideline.

Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorders. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment. Treatment Improvement Protocol (TIP) 54. HHS Publication no (MSA) 12-4671. Rockville, MD. 2012. I was a consensus panel member for this national project.

Scott JD, Unruh KT, Catlin MC, Merrill JO, Tauben DJ, Rosenblatt R, Buchwald D, Doorenbos A, Towle C, Ramers CB, Spacha DH. Project ECHO: a model for complex chronic care in the Pacific Northwest region of the United States. J Telemed Telecare. 2012;18(8):481-4 [original work].

Merrill JO, Duncan MH. Addiction Disorders, Med Clin North Am. 2014 Sep;98(5):1097-122. PMID: 25134875 [invited review].

Collins SE, Duncan MH, Saxon AJ, Merrill JO, Ries RK. Substance use disorders: alcohol, stimulants, and opioids. In Ratzliff A et al. Integrated Care: Creating Effective Mental Health and Primary Health Care Teams. Wiley. 2016. Book chapter.

Since 2016, I have been an Associate Editor of the Boston University web-based resource entitled Alcohol, Other Drugs, and Health: Current Evidence, the premier publication reviewing the latest relevant research on alcohol, illicit drugs, and health. See http://www.bu.edu/aodhealth/. I contribute article reviews every other month, listed below:

"New CDC Guidelines Recommend Limits on Prescribing Opioids for chronic Pain"
"No Clear Opioid Dose Threshold for Opioid Overdose Death Risk"
"Recent Pain Severity Associated with Subsequent Opioid Use in Patients with Prescription Opioid Use Disorder and Chronic Pain"
"Observational Study of Medicinal Cannabis for Chronic Pain Finds Reduction in Pain, Disability, and Prescribed Opioid Use"
"Further Evidence of Associations Between Higher Prescribed Opioid Dose and Poor Chronic Pain Outcomes"

V. Professional Development in Education

I have been extremely fortunate during my medical career to have had opportunities to grow as a primary care physician; to develop expert clinical skills in primary care medicine, addiction medicine, pain medicine, and HIV medicine; to participate in multiple communities of dedicated and skilled medical educators; and to participate in an array of research in areas of personal, professional, and national interest. In each of these domains, I have benefitted from working in teams: in primary care, I work with the HMC Adult Medicine Clinic and Madison Clinic and their dedicated providers, nurses, medical assistants, and administrative staffs; in my addiction medicine work, I have worked with multiple interdisciplinary teams within and outside the university to promote addiction medicine and its integration into medical practice; as a medical educator, I have been intimately connected with powerful learning communities, including the UWSOM Colleges, multiple Project ECHO teams, as well as the dedicated teachers of students and residents in the Adult Medicine Clinic; as a researcher, I have raised key questions about connections between addiction issues and medical care, especially opioid prescribing practices, and brought multiple researchers into these areas of national import. In each of these spheres, the work is primarily that of forming a community with common goals and values, contributing from a variety of backgrounds and skill sets. The greater UWSOM and Harborview communities have been the foundations of this work, allowing me the flexibility to craft a unique path.

Rather than repeat detail of the multiple communities of learners, teachers, and clinicians with whom I have been involved, which can be discerned through other sections of this teaching portfolio, I would instead like to use this space to reflect on my career as a whole and how I have arrived at a place where my interests, skills, values and commitments meet as a clinician educator based at Harborview Medical Center and the University of Washington. My path has not been a straight one and I feel called to highlight the rough winds I have encountered along with the smooth sailing. If I am asking my patients and students to disclose their fears as well as their hopes, perhaps I ought to do the same.

Early in my career I had some success with obtaining funding for projects that combined substance abuse policy and clinical care in the area of opioid addiction treatment. The excitement of writing successful grant applications (including two major grants from the Robert Wood Johnson Foundation) led me to believe that a research career was perhaps my proper path, and I spent substantial time in efforts to obtain research funding. While I developed significant research skills in this process, I was not successful in moving my career towards becoming an independently funded clinician-scientist. Certainly these efforts were impeded by multiple internal and external limitations, but in the end my unwillingness to set aside either clinical care or teaching activities to focus more concertedly on research was likely the main determinant of the outcome. I simply love taking care of patients and teaching, and a career without substantial time maintaining my clinical skills and passing those skills to others was not where my skills and passions were strongest.

At the time of the initiation of the UWSOM Colleges program, I was still involved in substance abuse policy projects that were meeting substantial systemic barriers to implementation, and though I strongly considered applying, I could not fit it into my programmatic and other clinical commitments. While there was some integrity to this decision, it did not move my career towards a focus on medical education at

that moment. As things unfolded, unfortunately, systemic resistance at multiple levels to my vision for integration of addiction treatment into medical practice made for a challenging time, as state policies as well as clinician hesitation actively and passively constrained my efforts. There were certainly opportunities that I missed to document how policies can impede appropriate care, but the time simply was not right for what I hoped to accomplish and this was difficult for me to accept. By the time a second opportunity to be involved with the Colleges and devote myself to a teaching community came around, it started to become clear that this was a path more meaningful personally to me and better matched to my skill set as well as the times. Still, I was surprised at how perfectly this opportunity matched my goals, values, skills and commitments.

My experience of the Colleges has been nothing short of career-changing and life-changing. Early in my career I identified my goals as helping patients with addiction disorders and their physicians work together more effectively, and I had devoted much of my energy on the patient end of that relationship. The Colleges allow me to focus on the physician end, and it is clear to me that my commitment to underserved populations and what it takes to care for such patients begins with the values and attitudes and communication skills that we must teach to the earliest students and nurture throughout their careers. And to do that effectively, we must partner with each other in learning communities that can support our values and commitments as we confront the many societal barriers impeding our patients' progress. The amazing community of the Colleges showed me how this might happen within medical education. In my interactions with clinical, educational, and research communities, I hope to emulate the College process and values.

Winds turn, and an opioid epidemic that I worked to highlight became a public health crisis. My skill set is unusually well-suited to address many threads of that epidemic, including expertise in opioid prescribing for chronic pain, opioid use disorder treatment, and education of clinicians in how to manage the complexity of these issues. Funding opportunities have increased, especially for the type of clinical addiction services I tried to pilot a decade ago, and I am optimistic that we can grow substantial addiction medicine clinical, research and education programs within the division of General Internal Medicine and at the UWSOM. My enthusiasm is tempered by knowledge that many people, including those other than the underserved populations I have worked with, had to succumb in order for societal resources be committed and attitudes towards those with addiction begin to shift, if only slightly.

These new winds power my recent engagement in efforts to initiate a fellowship program in Addiction Medicine at UWSOM. My clinical, educational, and program development experiences position me well to lead a fellowship, and my many contacts in the addiction treatment community will greatly facilitate the crafting of fellowship rotations and experiences. In these efforts, I am developing new leadership skills as I begin to access the institutional leadership within the Department of Medicine along with a wide variety of university, government, and community stakeholders. I have also attended the first two national meetings of the Addiction Medicine Fellowship Directors Association in conjunction with the last two American Society of Addiction Medicine annual meetings in Washington, DC and New Orleans, LA. The energy of this new community of educators has been palpable as we craft programs to train the next generation of addiction medicine specialists and establish addiction medicine as a robust field of study within American medicine and at multiple medical schools. I look forward to continuing my participation in this group, which is sure to be a rich source of inspiration and guidance.

My goal in treating patients and teaching students is to develop relationships that allow for disclosure of the "hard stuff" as well as the victory, the shame as well as the new direction. Everyone experiences ill winds and failures that can sometimes, but not always, be reimagined as a source of meaning. The support of multiple educational communities has allowed me to begin to embrace my variable winds and perhaps grow in compassion for the struggles of student and patients. With these values in the forefront, we can seek new seas.

VI. Regional/National/International Recognition

1999 Office-Based Opioid Treatment Panel. National panel convened by the Center for Substance Abuse Treatment, Department of Health and Human Services, Rockville, MD.

2002 Committee Member, Committee on Vaccines Against Drugs of Abuse, National Academy of Sciences, Washington, DC. Led to a NAS book on the subject.

2002 National Buprenorphine Expert Panel Member. This led to the publication of the national Clinical Guideline for the Use of Buprenorphine in the Treatment of Opioid Addiction (Treatment Improvement Protocol 40) published by the Substance Abuse and Mental Health Services Administration.

2004-9 Member, National Advisory Committee, Special Programs of National Significance: Buprenorphine and Integrated HIV Care, Health Resources and Services Administration. Participated in regular advisory committee meetings guiding program implementation.

2005 Chosen as a National Buprenorphine Mentor, Physician Clinical Support System, Substance Abuse and Mental Health Services Administration. This program supports clinicians in their use of buprenorphine for opioid use disorder treatment by providing them with a clinical mentor.

2009 Physician expert and mentor, two week technical assistance visit to Vietnam in support of their pilot methadone maintenance programs, Ho Chi Minh City and Hi Phong. Funded through PEPFAR.

2009-11 Chosen as a National Methadone Mentor, Physician Clinical Support System, Substance Abuse and Mental Health Services Administration. This program provided physicians with a mentor in their use of methadone for addiction treatment and pain management.

2010 Consensus Panel Member for the Substance Abuse and Mental Health Services Administration Treatment Improvement Protocol (TIP 54) on Managing Chronic Pain in Adults With or in Recovery From Substance Use Disorders.

2012 Global Telehealth Conference best paper award, Sydney, Australia.

2012 Department of Health and Human Services (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA) Science and Service Award in Office Based Opioid Treatment. National award for opioid addiction treatment telemedicine.

2014-15 Work Group Member for revisions of the Washington State Agency Medical Directors Group Opioid Prescribing Guideline. This influential guideline was the first to establish opioid dosing limits as a strategy for reducing complications from opioid medication prescribing.

2015 Member, Center for Excellence in Pain Education at the University of Washington. Responsible for national curriculum development in the area of pain management and substance use disorders. Sponsored by the National Institute on Drug Abuse.

2016 National curriculum development, Centers for Disease Control – Clinician Outreach and Communications Activity (COCA). In collaboration with other UW faculty and CDC staff, developed and presented 3 of 7 Webinars in support of the new national CDC Opioid Prescribing Guideline. Viewed/heard by ~1000 participants.

2016 Chosen as hub director for one of five national Opioid Addiction Treatment ECHO programs in support of HRSA-funded clinics implementing medication-assisted treatment programs. The UW hub provides twice monthly two-hour telemedicine sessions where participating clinicians can present cases and learn from an expert panel and each other about treating opioid use disorder. I have been collaborating on the associated national training curriculum that is delivered during each session, including leading the development of the module on medication treatment of opioid use disorder.

2016 Associate Editor for Alcohol, Other Drugs, and Health, the premier national update on addiction medicine related literature. Boston University. I submit bi-monthly reviews of recent selected articles.

2016-7 Study Consultant, National Institute on Drug Abuse Clinical Trials Network. Consulting on the PROUD RCT testing a nurse care manager based primary care opioid addiction treatment program.

2017 Invited senior author for the web-based HIV National Curriculum, edited by David Spach. Lesson on substance use disorder for HIV primary care providers.

VII. Mentoring

UWSOM Colleges

As part of my work with the UWSOM Colleges, I have formal mentoring relationships with 5-7 medical students each year through their four years of medical school. In my role delivering the Introduction to Clinical Medicine (now Foundations of Clinical Medicine) course, I interact with these students on a weekly basis as the bedside and in small groups, and I meet with them individually on a quarterly basis or more often to check in and provide feedback on their progress. This intensive work together allows them access to at least one faculty member who they can trust with sensitive information about their coursework, clerkships, extra-curricular activities and personal struggles during medical school. These mentoring relationships provide College faculty with an intimate understanding of the strengths and stresses of medical education from the student perspective. When difficult issues arise anywhere in the medical school process, the College faculty support each other by providing a structured setting to discuss and problem-solve student "cases" much as a medical team might meet and discuss clinical issues for more complex patients.

Research Mentoring

I also have developed research mentoring relationships with students, follows, and faculty members that are less formal than my College mentoring. Noteworthy examples of research mentoring include:

1) Early in my faculty career, I was a primary research mentor for Dr. Traci Takahashi during her NRSA fellowship project on soft tissue infections among injection drug users. We met regularly as she developed and implemented primary data collection for a project in the Harborview emergency department. This work led to multiple publications (CV references 3, 11, 15). Dr. Takahashi is now Associate Professor of Medicine at UW and VA in the clinician-educator track.
2) Dr. Ingrid Binswanger was another research mentee during her RWJ Clinical Scholar Program fellowship and we worked together on a number of projects resulting in publications (CV references 11, 15, 16). For this work, I received the RWJ Clinical Scholars Program mentoring award in 2005. Dr. Binswanger is now Associate Professor of Medicine at the University of Colorado and a leading researcher in addiction medicine.
3) I have been a research mentor for and now collaborator with Dr. Caleb Banta-Green, currently a Senior Research Scientist at the UW Alcohol and Drug Abuse Institute. During his PhD years (PhD awarded 2008), I was on his dissertation committee and we began collaborating on a number of research projects that launched his career in drug abuse epidemiology and health services research. We have since collaborated on multiple projects and publications (CV references 14, 17-26, 28-31, 33, 35, 36) and continue to work together on an opioid overdose education and naloxone distribution randomized trial.
4) I have also participated in the UW School of Medicine Medical Student Research and Training Program. This program provides summer funding for medical students to participate in research and develop a specific project. I was primary mentor for Shannon Rush in 2012, co-mentor for Matthew Novack in 2015, and co-mentor for Claire Simon in 2016.

Clinical Mentoring

I was selected to participate in two national level clinician mentoring programs through the SAMHSA-funded Physician Clinical Support System. These projects have provided mentoring to practicing clinicians in the areas of buprenorphine prescribing for opioid use disorder (2005ff) and methadone treatment of opioid use disorder and/or chronic pain (2009ff). Physicians sign up for mentoring and mentors are available to answer clinical questions and questions about the logistics and challenges of providing new forms of treatment. The use of this program was limited and I individually mentored no more than a dozen physicians, interacting with them from 1-10 times depending on their needs. This national work supplemented more active local clinical and regional clinical mentoring, as I have become a resource for clinicians through educational programs, especially telemedicine. Over the last 10 years, I consult with on average 3-5 clinicians monthly outside the formal telemedicine setting. These consultations concern in-patients and out-patients with addiction disorders and/or complex pain.

As one of a small number of general internists with addiction medicine expertise, I have increasingly become a clinical mentor for a growing number of generalist faculty now entering the field. As addiction medicine has become established as a formal ABMS specialty, more faculty are seeking Addiction Medicine certification. At Harborview, Jared Klein (Clinical Instructor of Medicine) and Jocelyn James (Acting Assistant Professor of Medicine) have become certified by the American Board of Addiction Medicine. Four additional faculty are planning to take the Addiction Medicine certification exam in the fall of 2017, including Dawn Tanaguchi (Clinical Instructor of Medicine), Leslie Enzian (Clinical Associate Professor of Medicine), Ivan Lesnik (Chief of HMC Pain Service, Department of Anesthesia and Pain Medicine), and Sara Jackson (Clinical Assistant Professor of Medicine).

VIII. Educational Administration and Leadership

Since 2009, I have been the faculty sponsor for the internal medicine residency Addiction Medicine elective month. This involves updating didactic curricula, evolving the sites where residents rotate during the month, and providing direct teaching ½ day weekly. This has been a popular rotation with one resident per month participating.

I am currently leading efforts to initiate a University of Washington Addiction Medicine fellowship program. I have attended the first two national Addiction Medicine Fellowship Directors Association meetings in 2016 and 2017, and the UW has been identified by The Addiction Medicine Foundation as an emerging fellowship program. This project requires development of curricula, training sites within and outside the UW system, faculty development, and ACGME accreditation. It also requires identification of funding, which I am currently pursuing through opportunities within the Washington State Medicaid Demonstration Project (Medicaid Waiver) as well as King County and anybody else I can think of!

IX. Honors and Awards

2005 University of Washington Robert Wood Johnson Clinical Scholars Program Mentor Award

2012 Department of Health and Human Services (HHS) Substance Abuse and Mental Health Services Administration (SAMHSA) Science and Service Award in Office Based Opioid Treatment (for telemedicine work)

2015 UW Medicine/Harborview Medical Center Cares Award (for service providing yoga instruction)

X. Long-Term Goals

The national epidemic of opioid use disorder and opioid overdose death has galvanized increased support at the local, state and federal levels for addiction treatment, addiction medicine education, and scholarship related to addiction medicine. My background and experiences in clinical care, teaching, research and program development in these areas provide a solid foundation for pursuit of multiple educational

advancements in service of patients with addiction disorders, the integration of addiction treatment and education into primary care, and the academic structures supporting medical and graduate medical education. My main areas of future programmatic development are:

1) Development of addiction treatment programs in primary care settings. Building on the success of our Office-Based Opioid Treatment program at HMC, we are seeking funding through the 2016 federal CURES Act to become a "hub" in the state-funded "hub and spoke" model for expanding access to medication-assisted treatment for opioid use disorders. This project plans to engage and support primary care clinics to begin or expand buprenorphine treatment integrated with primary care. This is primarily an education endeavor for clinics not accustomed to providing this type of care.

2) Development of the Harborview Medical Center Integrated Addiction Medicine Consultation Service. In collaboration with the Department of Psychiatry and the Division of Pain Medicine, I am leading the development of a new consultation service supporting multiple inpatient services in their care of patients with addictive disorders. Standardized treatment protocols, medication support and linkages to outpatient services are all urgently needed, and education of students and residents and future fellows will be fully integrated into the service.

3) Initiation of the University of Washington ACGME accredited fellowship in Addiction Medicine. In 2016, ABMS approved Addiction Medicine as a multi-specialty specialty, and ACGME accreditation of fellowship programs is expected in 2018. Multiple GIM faculty are now or will be certified in addiction medicine and will be eligible to teach in this program and attend on the consultation service. We have strong collaborative ties to multiple community programs that can provide clinical education for fellows while serving community need for physicians with addiction medicine expertise. Our fellowship application is in preparation for submission in February of 2018 and funding is being sought to have our first cohort of fellows in July, 2018.

These initiatives, like my Colleges experience over the last decade, is providing me with new inspiration to again renew my vows as a physician and my values and goals relating to the treatment of underserved populations, which is what has always drawn me to both addiction medicine and medical education.

August, 2017 Update

It has been a busy spring and summer! I led a successful effort to obtain federal CURES Act funding ($787,000 8/17 through 4/18) to develop a Hub & Spoke network for opioid addiction treatment that incorporates our Nurse Care Manager model into multiple primary care, behavioral health, and addiction treatment clinics. We hope our network and the others in Washington State will expand access to needed medication treatment for opioid use disorder. As an adjunct to this project, NIDA released a RFA requesting clinical trial research on behavioral interventions associated with this specific federal funding stream. As Co-PIs, Cynthia Price (School of Nursing), Judith Tsui (GIM) and I submitted a R21/R33 proposal to test a mind-body intervention as an adjunct to medication assisted treatment of opioid use disorder within our Hub & Spoke network. In addition, we plan to use some of the Hub & Spoke funding to provide nursing support for an Addiction Medicine consultation service at Harborview Medical Center, where many complex patients with opioid use disorder require careful assessment for medication and linkage to outpatient services. This consultation service is a key structural step towards an Addiction Medicine fellowship program, which we hope to initiate in 2018.

Our Office-Based Opioid Treatment program has also been an active site for research project development. Out summer 2016 Medical Student Research Training Program (MSRTP) student, Claire Simon, has a publication in press describing the care cascade of patients in our Nurse Care Manager program, a project that directly led to program policy changes in an effort to improve engagement in

initial medication treatment. Our 2017 MSRTP student, Bjorn Paine, is well along in analyses of those policy changes. In addition, I am collaborating with Judith Tsui on a SBIR grant to develop a mobile app that will allow video documentation of medication adherence in buprenorphine treatment. Finally, we are beginning a collaboration with Susan Collins (Department of Psychiatry and Behavioral Sciences) to develop a harm reduction intervention as an adjunct to our Office-Based Opioid Treatment program.