Academic Medicine: A Guide for Clinicians

Robert B. Taylor, MD
If you want to know what lies ahead on the trail, ask someone who has made the journey and returned.

*Old Chinese proverb*

My advice is to be true to yourself, pursue your dream, and keep your options open. This advice is for anyone in medicine—whether you are a medical student or an attending-level clinician. It is never too late to make the choice to be happier in life.

*Advice from one of the book's contributors*

The improbability of the events depicted in this [book] is the surest indication that they actually did occur.

*Modified from the declaration at the start of the HBO movie And Starring Pancho Villa as Himself.*

*The story tells how the Mexican revolutionary collaborated with a U.S. film company to spread his message.*

*I will return to this quotation in the last chapter of the book.*
Preface

What makes a successful academic clinician?
Good judgment.

How do you get good judgment?
Experience.

How do you get experience?
Making mistakes.

Is making mistakes really the best way to learn?

There are three important life decisions when mistakes could be especially costly for the clinician: Whom (or if) you marry, your specialty choice, and the path of your career. I really can’t help you with the first decision, and your specialty choice has probably already been made. This book is about the third decision—the direction of your career path. If you decide to become a faculty member at an academic medical center, your career trajectory will depend on the choices you make (or don’t make) when you encounter the diverse opportunities that arise throughout your professional life. I hope to help you make good decisions and avoid the common mistakes.

This book is intended to be a newcomer’s guide to the academic medical center and the teaching hospital. It is written from the viewpoint of those who have walked the trail and learned from experience. As one very new faculty member remarked when I told him about plans for the book, “It would have been great to have this information last year, when I was looking at faculty positions. When you are finishing your residency or fellowship, you don’t know what you don’t know.”

The book contains specific tactical advice for readers in each stage of considering or beginning an academic medicine career. Readers who would benefit from this book include medical students, residents and fellows considering academic careers, and junior faculty members in all
specialties. In fact, I have found some of the latter group, junior faculty members, to be surprisingly uninformed about the environment in which they work, perhaps because they think themselves too busy to have time to learn about faculty development, scholarship, and promotion. Practicing physicians considering a move to academic practice and teaching should read this book before mailing a curriculum vitae. The chief qualifications for readership are that you actually see patients and that you are considering or beginning a teaching career; that is, becoming or being an academic clinician.

This book is the view from 7500 feet. Bob Bomengen, MD, is a physician friend who left private practice to spend a year in our clinical department at the Oregon Health & Science University. Bob’s practice is in Lakeview, Oregon, a frontier community of about 3000 persons. His hobby is flying his single-engine Cessna and, from his small plane, he can see the towns, streets, individual houses, and people. He can see rivers and trees, cattle and horses. He can see things you can’t see in a huge jet at 35,000 feet, from which the view is likely to be a cloudy blur. Academic medical center chief executive officers, university presidents, and deans live at 35,000 feet. Clinicians like Dr. Bob Bomengen and those who make the move after residency or fellowship enter academic medicine at a much lower altitude. This book is written for these individuals—those pondering or starting an academic career and wanting to learn about the world of clinicians who also teach and sometimes do research and write scholarly articles and books.

This book will be especially useful for academic clinicians in their first 5 years on faculty. These, generally younger, academicians can also see the trees and rivers but still seem to bump into limbs and get their feet damp, sometimes in hot water. Residency and fellowship training does not adequately prepare the trainee for an academic role. The change from learner to faculty member is profound, and this book can help prevent early career missteps.

This is the book I wish had been available when I entered academic medicine in 1978, not knowing the meaning of the acronym NOGA or the difference between hard and soft
money. Later in the book, I’ll tell you why and how I began an academic career that led me to two of America’s premier academic medical centers, and I will share some personal adventures over the past 27 years. The book also describes the experiences of others, as well as offering practical advice as to how you can improve key skills in teaching, scholarship, grant-getting, administration, and, yes, clinical abilities.

A key feature of this book is the inclusion of responses to a questionnaire sent to academic clinicians in various specialties and geographic locations. Questions included: “What attracted you to an academic medical career?” “What has been the surprise about your work in an academic medical center?” And “What is some advice you would give the clinician entering academics?” Contributors’ stories set the stage for concepts presented in the book. The contributors have my profound thanks for telling about their lives.

The book also includes comments and opinions from scores of other academicians. Instead of answering formal, structured questions, these clinicians provided brief comments, short anecdotes, and lessons learned from experience. I am grateful for what they have brought to this project.

I want also to thank two special people. One is Coelleda O’Neil, who helped with the figures and tables in the book. The other is my wife and colleague, Anita D. Taylor, MA Ed, an experienced author in her own right who consulted liberally in all phases of writing and did not hesitate to tell me when sentences and paragraphs “needed some more work.”

I hope that there will be a second edition of this book some day. Based on that possibility, I invite you to share your thoughts, experiences, perhaps even a mistake—in short, your adventures in academic medicine.

Robert B. Taylor, MD
Portland, Oregon
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Contributors

The contributors to this book represent a “convenience sample” of physicians with academic experience. The list was not randomly selected, and I am sure there is some selection bias. I did, however, obtain diversity in regard to geography, specialty, academic setting, gender, age, and rank.

The contributors listed below represent:

- Two countries: United States and Canada
- Eight states in the United States and one Canadian province
- Eleven medical specialties and subspecialties
- Ten academic medical centers
- Faculty ranks ranging from instructor to tenured professor

The ages of contributors vary from 31 years to 72 years, and the faculty ranks range from instructor to professor. There are an assistant dean, two associate deans, and a former dean. One contributor is on the threshold of an academic career, one is “easing out,” and one has recently left the academic setting. Some contributors entered academic medicine right out of training; others came from private practice settings. I believe that each of these individuals represents an important perspective.

I thank the following contributors:

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We are about to embark on a journey. The book's contributors and I will be your guides as you, a clinician, enter the world of academia. The culture shock can be like my trip to the People's Republic of China in 1980, just as that country opened to foreigners after being “closed” for decades. The Chinese people I encountered at that time lived very differently than me; they dressed differently, spoke a language that I could not understand, and had a value system that was much unlike mine. But I was a tourist; I was not planning to live there. I could observe the people and the culture, but I didn’t attempt to become one of them.

The resident, fellow, or clinician in private practice who becomes an academician soon finds some things that are different. During your first few years on faculty, you become aware of academia's idiosyncrasies. The language can be new and confusing—a whole new set of jargon, abbreviations, and acronyms. Examples include effort allocation, formative feedback, indirect costs, RFP, NOGA, and XYZ. But what is really different is the value system. In academia, the *summum bonum* is the creation of new knowledge. Grant-getting skills may be seen as more important than teaching abilities. Clinical expertise, although important, is not always at the top of the values pyramid.

At this point, let us agree on some definitions: A *teaching hospital* is a setting for patient care that also has one or more educational programs. According to the *Journal of the American Medical Association*, teaching hospitals are “hospitals that are affiliated with medical schools and serve as ‘classrooms’ for physician, nurses, and other health care workers in training.” A *medical school* has faculty members that teach medical students; there may also be some related training programs, such as physicians’ assistants. An *academic medical center* (AMC) includes a medical school that trains physicians, a system for delivering health care serv-
ices, and research activities involving laboratory science, clinical investigation, or both. At an AMC, you will probably find various specialized clinics, research centers, master’s and PhD degree programs, and more. For example, I work at the Oregon Health & Science University (OHSU), which has schools of medicine, nursing, and dentistry, plus five hospitals and educational programs in a variety of health-related areas.

Each AMC is unique in various ways. You will see this fact illustrated throughout the book. Variations include the organizational structure, faculty compensation system, clinical practice plan, promotion and tenure guidelines, the unwritten rules, and even the culture. A favorite aphorism is, If you have seen one academic medical center, you have seen one. For example, in a state university system, you may be a candidate for promotion to associate professor of medicine and find an English literature professor on the promotion and tenure committee that evaluates your fitness for advancement in rank. This is not the case at Oregon Health & Science University; my school of medicine is not part of the University of Oregon or Oregon State University and thus has no departments of English literature or ancient history, but we do have students working toward a variety of degrees, including PhD, master of public health, master of science, and master of nursing.

The book tells about life as an academic clinician, a term that I will explain further in Chapter 1. In the first four chapters, I will discuss the academic career decision, life in academia, and how to get the job you want. In Chapter 5, I will tell about basic skills needed—clinical practice, teaching, and scholarship. Chapter 6 presents some introductory guidance about more advanced academic skills; these include conducting research, assembling a grant proposal, and writing for publication. Administrative skills and academic medicine success skills are described in Chapters 7 and 8. Tables in these chapters show where to look to learn more. Chapter 9 gives advice on how to manage your career and your life. The stories of those who have walked the trail before you, and some lessons learned along the way, are
found in Chapter 10. The Glossary explains the sometimes-
arcané abbreviations and educational idioms encountered in
academic medicine.

The experiential basis for the advice given is the collection
of stories offered by the book’s 20 contributors, whom
I estimate have a combined total of more than 300 career
years in academic medicine. The contributors represent 11
medical specialties and subspecialties in academic medical
centers across North America. I used network research to
assemble the panel, who range in academic experience from
first-year junior faculty to seasoned full professors. In com-
pling their comments and anecdotes, I have tried to make
the book as authoritative and yet as “personal” as I can.

In addition to sharing personal experiences, I have
made liberal use of the medical literature, especially in
regard to teaching, scholarship, research, grant getting,
and other academic endeavors. Also, because I believe that
all clinicians should have interests outside of medicine, in
the coming pages we will visit the island of Cos and the
Oregon Trail, *Tyrannosaurus rex* and St. John’s wort, Mark
Twain and Marcus Aurelius, and the alligator that ate my
nephew’s dog.

Just before we depart on our journey, I should tell you
about your chief guide—me. I think this is important
because you must always assess the source of any advice you
receive. You should know the “expert’s” background, experi-
ence, and, if possible, that person’s biases and what the
origins of those viewpoints might be.

So here goes: I am a family physician and have been a cli-
nician for 43 years. After my training and required uni-
formed service time, I was in group practice in the small
town of New Paltz, New York, for 4 years, and then in rural
so! solo practice in a nearby village for 10 years. In this clinical
setting, I began writing and editing medical books. This
scholarship is what prompted me to sell the office that I had
built and move my family from the Hudson Valley of New
York State to Winston-Salem, North Carolina, where I joined
the faculty of the Bowman Gray School of Medicine of Wake
Forest University. I believe that moving from private, solo
practice to academics made me keenly aware of the cultural differences in the two settings. In the early years, I experienced some painful lessons as I struggled to fathom academic medicine's complexity, quirks, and unwritten rules of conduct.

I spent 6 years at Wake Forest University School of Medicine, learning the ropes of academic medicine, before deciding that I wanted to be a chairman of a medical school clinical department. And then, after interviewing at a number of medical schools around the country, in 1984 I became the second chairman of the Department of Family Medicine at the Oregon Health & Science University School of Medicine in Portland, Oregon. I held this position for 14 years, and then in 1998 I resigned the chairmanship and assumed my current position as professor emeritus. During my academic career, I have worked with seven medical school deans, which—do the math—speaks to the relatively short tenures of those who lead our medical faculties. Also, along the way I wrote and edited 23 medical reference books, held the position of chair of the Medical Board of the Medical Staff at our University Hospital, and served with the National Board of Medical Examiners and in leadership roles in several national and international organizations.

In addition to providing vital information to guide early career decisions, this book has a “hidden agenda,” which I hereby share with you. This goal is to enhance the job satisfaction and status of the growing number of clinician-educators in academic medicine. I hope to do so by encouraging some scholarly activity in addition to clinical care and teaching, by showing them how to fit into the academic milieu, and by guiding these faculty members in strategies to succeed in an apparently benign, yet highly competitive, environment.

Now we’re ready to start. Chapter 1 discusses the early steps in an academic career, beginning with a very important decision as to what we will call the clinician who teaches students and residents and may do some research, writing, or academic administration.

Enjoy the adventure.
REFERENCES

Deciding on an Academic Career

Medicine is the oldest learned profession in the world and it is rooted in the past. Each successive generation of doctors stands, as it were, upon the shoulders of its predecessors, and the fair perspectives that are now opening before you are largely the creation of those who have gone before you. It is therefore reasonable to think that anyone who has spent a long professional life in medicine must have something to hand on—however small or modest.


Have you ever thought: “I have learned a lot in medical school and specialty training (and perhaps in practice). Wouldn’t it be great to teach students and residents what I know? Maybe I could even do some research. I wonder what a teaching career is really like. Might a career in academic medicine be right for me?”

THE JOY OF TEACHING

“Doctor Taylor, I made the diagnosis! His symptoms were just what you described in class.” Out of breath from running across the courtyard outside the cafeteria, this medical student, Jennifer, couldn’t wait to tell me about her diagnostic triumph.

Every 6 weeks I teach a small-group seminar for third-year medical students about the diagnosis and management of headaches. In the session, we spend about 5 or 10 minutes discussing cluster headache. A few weeks earlier, Jennifer had been part of my seminar group. Subsequently, as part of the clerkship, she had been seeing patients in the office of a community family physician, when a young man came in with a history of a series of terrible headaches that had
been prompting him to visit the emergency room, where he had received various injections of pain-killers, but no definitive diagnosis.

Jennifer had interviewed the patient prior to his seeing the doctor. When he told of his recent series of once-daily headaches and a similar series about 9 months ago, Jennifer had one of these “Aha!” moments that, regrettably, clinicians experience all too rarely. She asked some more questions, everything fit, and she presented the patient to her preceptor with a tentative diagnosis of cluster headache. Of course, she was correct, and for the patient, it was the initial identification of the problem.

No wonder Jennifer was excited and couldn’t wait to tell me about it.

For the academic clinician involved in teaching medical students and residents, this sort of experience is a highlight that you will recall happily for a long time. Teaching is why most of us chose academic careers.

One of our contributors, who entered academic medicine soon after residency, writes, “I grew up wanting to be a teacher, but I didn’t believe that I could teach medicine until early in my residency. From that point, it was just a matter of choosing between practice-based teaching, residency-based teaching, or medical school–based teaching.”

Another contributor is a radiologist who made the move to academic medicine after three decades in successful private practice. When asked why, he replies, “I wanted to do some teaching.” This is a common response by our book’s contributors, but there can be other reasons as well. Later he adds, “Also, I wanted to give something back to medicine.”

But there is more to academic medicine than teaching. Teaching is definitely part of what you do but may be a small part of your daily activities. There will also be clinical care, probably some administration, and the opportunity for research and scholarship. While doing this, you should also learn about the organizational dynamics of the academic medical center, including the cultural expectations, the hierarchy of power, and the unspoken rules. I tell you much of this in the pages to come—but not all. When it comes
to teaching skills, research, medical writing, and getting grants, there is way too much for this single volume; many books and articles have been written on these topics, and I will provide tables listing some of my favorite resources.

At this point, I think it is important to examine the phrase I will use in the book to describe the clinician who chooses an academic career: the *academic clinician*. And that will also take me, early in the book, to an area of controversy.

**THE ACADEMIC CLINICIAN**

Before I began writing this book, I thought a great deal about what I will call us—patient-care-oriented physicians who work in academic medical centers where there is the opportunity to teach, administer programs, do research, and write for publication. In fact, there is more than the opportunity; excellence in one or more of the nonclinical parts of the job is the key to advancement and “academic success.”

Currently, a number of terms are used. Two terms you will hear are “clinician-educators” and “clinician-teachers.” The former is most commonly used. Branch and colleagues use the terms interchangeably.\(^1\) Over the past 10 to 15 years, academic medical centers (AMCs) have established clinician-educator faculty positions, which now constitute an entry-level academic job for many young physicians.

Branch and colleagues state that, “Although no consensus exists, the essence of all definitions includes the concept of a superior clinician, who is also a dedicated teacher.”\(^1\) This is the academic rationale. However, on an economic basis, the clinician-educator positions were established because AMCs needed clinicians to generate income that would support the institution in the face of decreasing federal and state funding for education and for hospital care of the needy. Thus, clinician-educators are filling an important need but are not necessarily highly respected in the institution. When the status of the clinician-educator is contrasted with the status of research-oriented faculty, the reality of the two-tiered academic system becomes, in the jargon of Wall Street, transparent.
The most flagrant evidence of the status differential becomes evident when we consider the award of tenure and promotion in rank. Tenure, the more-or-less guarantee of job security, is a time-honored academic reward. An appointment as a clinician-educator, with scant expectation of participating in scholarly activity, offers inherent obstacles to promotion and tenure. According to Levinson and Rubenstein: “Most often, these new tracks did not offer the possibility of tenure, partly because of the reluctance of academic institutions to make long-term financial commitments to faculty members with primarily clinical and teaching responsibilities.”

As far as promotion is concerned, the academic medical centers have done a cautious soft-shoe dance. Most medical schools have established special criteria for promotion of clinician-educators. However, in the process, the institutions have added adjectives such as “clinical” to the designation of rank. Thus, instead of becoming an associate professor, one might be a “clinical associate professor,” and we all know that this descriptor connotes lower scholarly achievement. (See Chapters 2 and 3 for more about the academic promotion process.)

In 1999, Levinson and Rubenstein recommended that the promotion requirement of a regional or national reputation be eliminated for clinician-educators. They also wrote, “Second, the requirement of publication in peer-reviewed journals should be eliminated.” They go on to state that, “Academic institutions should find new and creative ways to evaluate clinician-educators’ teaching abilities and clinical excellence.” But, to me, this seems to perpetuate the two-tiered system.

Apparently, their proposed changes did not entirely satisfy Levinson and Rubenstein, either. The next year, writing in the journal Academic Medicine, they proposed “the development of a new faculty position, a ‘clinician-educator-researcher’ to foster the scholarship of discovery in medical education and clinical practice.” This idea was appealing until I read on to find that the authors recommend that these physicians “receive advanced Master’s or PhD-level training in the area of education.” They go on to recommend that,
“Subsequent to such training, AMCs will need to support these faculty members, who will need to devote more than 75% of their effort to research endeavors concerning education or clinical care, similar to the effort of faculty conducting basic biomedical research.” I was on board until the proposed requirements for advanced degrees and 75% research effort. Also, “clinician-educator-researcher” has too many syllables for me. The phrase feels unwieldy.

For the rest of this book, I will use the term “academic clinician.” It means what I wish Levinson and Rubinstein had proposed. In the pages to come, “academic clinician” describes a physician who treats sick people, teaches residents and students, and engages in scholarly activity—even if the three activities are not in equal balance.

Some have called this the “triple-threat academician,” an allusion to the football player who can run, pass, and kick the ball. In today’s specialized world, many medical faculty members choose not to be triple-threat and to emphasize a single facet of their career to the virtual extinction of the others. And many of these academicians become quite successful developing only one narrowly focused academic ability, usually research. In fact, some say that the triple-threat academician is now an anachronism. I believe that this might have been true when research ruled in AMCs, when teaching and clinical care were less valued. But today, with the increasing need for clinical income, AMCs are recruiting and hiring clinicians. We just need to find ways to help these newly hired clinicians achieve first-class academic status.

I am aware that I am not the first to use the term “academic clinician.” For example the University of Pennsylvania School of Medicine uses the term to describe full-time untenured appointments with the word “clinical” added to designation of faculty rank. Johns Hopkins has “academic clinicians.” I am sure some other AMCs also do.

I will deal later with how the academic clinician fits into the academic milieu, achieves appropriate balance, focuses his or her energies, gets promoted, and, who knows, maybe attains tenure. First, I will examine the decision to become an academic clinician.