

Early Mentoring for Research and Academic Careers

Journal of Investigative Medicine High
Impact Case Reports
Volume 8: 1–2
© 2020 American Federation for
Medical Research
DOI: 10.1177/2324709620949316
journals.sagepub.com/home/hic


Asim Kichloo, MD¹ 

Abstract

Research stands at the foreground of modern advances in medicine. Doing clinical research helps you become a good clinician, and doing good clinical work in turn makes you a better researcher. Being a good researcher and being a good clinician, most of the times, has one thing in common, a good mentor. When student at some point in medical school contemplates a research rotation, and this first rendezvous with the processes and, more important, the people involved in the project, determines how much interest one generates to carry forward in their medical career. This editorial focuses on the early mentoring for research and academic careers.

Keywords

mentorship, research

Every student at some point in medical school contemplates a research rotation, and this first rendezvous with the processes and, more important, the people involved in the project, determines how much interest one generates to carry forward in their medical career. Our principal investigator (PI) at my first research rotation used to tell us, “Let’s go and get it done,” never “go do it yourself,” and this is what we carried forward with us, first as medical students, then residents, and now as PIs ourselves. This is the power of a mentor; one part motivation and one part participation.

Research stands at the foreground of modern advances in medicine. The importance of research in the medical field is undeniable, and as participants of the scientific community, this need not be explained. What needs to be pondered on is how to expand the research-focused medical community sufficiently to deliver the advances in medical sciences that realize the promise of the progress that is being made on the scientific side of things. Who are these people who are pioneers in their fields vis-à-vis the progress they have made in bringing fresh understanding of the disease process, be it pathophysiology, genetics, or management of ailments new and old. When we talk about this the research-focused medical community, one central question, staring us clinicians in the face, clinicians who do clinical and research work side by side, is what can be considered as meaningful research and how to balance the clinical responsibilities and still dedicate the time necessary to research and mentoring for it. The answer might not be simple but worth seeking for.

Doing clinical research helps you become a good clinician, and doing good clinical work in turn makes you a better researcher.¹ The final question in clinical research can become the first question you ask in clinical practice. Also,

the final question you are stuck with in your clinical practice can very well become the first question you ask in your clinical research project. This is how clinical practice and clinical research can complement each other. So what, if the primary goal of getting into research for a medical student early on in their career is to have access to better residency prospects or competitive fellowships, the broadening of their mind through critical thinking still happens, and as with everything in life, one thing does lead to the other, and here this one thing is advancing the very field we practice, in ways big or small. As Neil Armstrong famously said on first setting foot on the moon, “One small step for man, one giant leap for mankind.”²

According to Sara K. Rosenkranz et al, students who had a sense of achievement through supported compulsory research activities that were conducted as a team were more likely to view future research activities positively.³ External factors to motivate participation in research work often predominate in the preclinical years for a medical student. As the student finds mentors, identifies areas of personal interest, becomes familiar with the process of research, and begins to master the basic elements of writing proposals, designing research projects, and coordinating with different members of the research team, a confidence can emerge.

¹Central Michigan University, Saginaw, MI, USA

Received July 12, 2020. Accepted July 19, 2020.

Corresponding Author:

Asim Kichloo, MD, Central Michigan University School of Medicine, 1000 Houghton Avenue, Saginaw, MI 48602, USA.
Email: kichloosim@gmail.com



This mastery may lead to increasing internalization of the motivation to do research, and as they move to clinical years of medical school and start feeling competent to indulge in more research projects of interest, the external motivating factors recede to a point where motivation to do research may become completely internalized. Ideally, this is where every clinician should be, entering a residency program. But this same model can be followed and reproduced from any point onward in the career of a physician. Be it a third-year resident, a fellow, or an attending, the same principles of internalizing motivation to do research can be replicated from any point in a career trajectory. As physicians find individuals who can serve as mentors who will stand with them steadfastly, increasingly more meaningful research will result. My own career stands testament to this fact.

There is so much that can be done. By doing case reports, case series, reviews, cross-sectional studies, systematic or meta-analysis of data-based studies, physicians at any stage of their career can act as bridges between research and clinical work, providing clinically relevant answers to the questions simmering in their own minds and in the minds of their physician colleagues, making research work not only a professionally significant activity but also a great starting point for socializing among physicians as well.

To quote the most junior member of our research team, on finishing his first research rotation block with us,

“Dr Kichloo, the questions are all around us, aren’t they? All we have to do is look.” Just like Einstein taking advice from his father, what we need to do is come home everyday with a question.⁴ That’s all.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Asim Kichloo  <https://orcid.org/0000-0003-4788-8572>

References

1. Katzka DA. How to balance clinical work and research in the current era of academic medicine. *Gastroenterology*. 2017;153:1177-1180.
2. One giant leap for mankind. *JAMA*. 1973;225:1246-1247.
3. Rosenkranz SK, Wang S, Hu W. Motivating medical students to do research: a mixed methods study using self-determination theory. *BMC Med Educ*. 2015;15:95.
4. Winter FD Jr. Einstein: his life and universe by Walter Isaacson. *Proc (Baylor Univ Med Cent)*. 2007;20:431-432.