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Welcome to Research & Rounds, the Physician Scientist Career, where we explore the questions, challenges, and decisions that medical students, residents, fellows, and early career faculty face as they build careers in medicine and research. I'm Dr. Evan Noch, a neuro-oncologist and physician scientist, and today we're going to talk about protected research time.

So, there's a few questions that I'd like to address today. Number one, what should that promise actually look like in a week? Number two, what do you nail down before you accept your job? And number three, most importantly, what do you do when your time starts disappearing from you?

So, the thing is that protected research time sounds simple until it isn't. Because on paper, 75% effort for research sounds wonderful because you're actually able to do research for the majority of the time. But the problem is that also your real week starts happening and potentially your clinic could run late, you are writing notes, and you are answering patient messages that are bleeding into the next morning.

A service might need coverage, and one of your colleagues might ask you if you can join a committee and might say that it's not very much time. And so, none of that actually sounds unreasonable on its own. But the problem comes at the end of the week when you realize that your research time has turned into clinical catch-up time.

And it might seem like this may not happen to you if you're early in your career, but trust me, this happens so easily, and it's really easy to give up your research time to take on more clinical duties or to help a colleague out in a time of need. But really, your job is to hopefully protect your research time and stay committed to building your research program.

So protected time is not just time when you're not in clinic or on the wards, and it's not also whatever's left over after your clinical teaching and administrative time. It really has to be a formal decision that part of your effort is going to your research and to your career development, and the rest of your job should get adjusted to actually make that real So let's unpack what that looks like in practice, how to get it in writing, and also what to do when the protected research time starts to slip away.

In our first segment, we're going to talk about what protected time looks like in a real week, because a percentage alone actually tells you very little. For NIH mentored K awards, for example, at least seventy-five percent of your time must be spent on research and career development. Now, some institutes will allow you, uh, to spend a lower amount of time for surgical or procedure-heavy specialties, but rarely below fifty percent.

Of course, you need to check with the specific institute and funding announcement for details. Now, these are grant rules, not a universal definition, but they do show how specific it can get when you're actually trying to figure out how much time you're going to spend in the lab. The opposite is also really important to figure out.

In other words, if seventy-five percent of your time is spent on research, what is the other twenty-five percent going to have to look like? So how many clinic sessions are you gonna have? Or how many inpatient weeks or procedures or how many nights or weekends? Think about who's going to cover the inbox while you're in the lab, and how much documentation is going to follow you into the next day.

Because if you have a full day of clinic, you might spend the next day or multiple days writing those notes, or you might use what's called pajama time at night to finish your notes well into the early morning hours.

Now, of course, you can be scheduled at twenty-five percent clinical time and spend way more than that on clinical care.

And of course, most of us do that because all of these clinical responsibilities, including administrative duties, really spill out onto your research time. So, you need to look at the full clinical footprint and also talk to others at your institution or in similar specialties, how they're managing that time and allowing it to fit into a prescribed twenty-five percent, for example.

Because also, it's not just face time with your patients, it's the preparation, your notes, looking at results in Epic, answering patient messages and calls, and maybe you're even scheduling family meetings or conducting handoffs with colleagues or taking call. And then, of course, there's teaching and administrative duties that are attached to the clinical role, which are so important for physicians–scientists, particularly to mentor and teach those who are coming up in training.

But it also digs into the time that you can actually build your research program. So, in one qualitative study that looked at seventeen academic leaders across six hospitals and a medical school, they cited that academic time was usually about one day a week for non-shift specialties. But much of that day was eaten up by administrative, uh, duties and unfinished documentation. So, it's really critical to take those components into account.

How the time is arranged can matter too, because four uninterrupted days can sometimes beat two scattered half days depending on what kind of research you're doing, because different research has different needs.

So, for basic science, for example, you might want long, predictable blocks because that might be able to keep your team running while you're on service. For clinical research, you might

need your time to be synced with participants, coordinators, or your clinic. And for computational and health services work, that might be more flexible or more portable, but you still need to concentrate on that work.

In my job as a neuro-oncologist, I spend about a half a day to a full day in clinic per week, and I spend the rest of the time in my lab and also do a lot of mentorship for junior trainees. And so that together builds up the rest of those four days a week of clinic. The bottom line is that your schedule has to fit the work you're actually trying to do, and so you need to put a lot of thought into how you're actually going to build your schedule.

In the second segment, I want to talk about what has to sit behind the promise because protected time actually has to be paid for. I know it's hard to imagine that you have to pay for the time that you're spending in a research lab and that the institution should be so happy that you're there doing your research, but in reality, that's not what happens.

We often don't say this loud enough that we need to think about how we're spending money to build this time in the research lab. And less clinical effort means the department has to give up work and revenue for you to do the job that you're doing in lab. And something, of course, has to fund your salary and research effort instead. That could be a training grant, a K award, an institutional support pathway. It might be departmental funds, a startup package, philanthropy, or even a mix of the above.

So, let's talk about how the K awards handle it. Now, NIH covers part of the salary for your required effort, and your institution can supplement from non-federal sources, but you can't have extra duties that interfere with that award. So, the institution has to document your time, the facilities, your resources, and support that they're offering. Sometimes when applying for a job, whether it's at your own institution or somewhere else, you might be told that we'll protect your time once you get a grant. That's not the same as having protected time now. And for a K award specifically, it's really not gonna fly because your lab can't be contingent on getting the award.

Now, if you were at the joint meeting of the Association of American Physicians, American Society for Clinical Investigation, and the American Physician Scientist Association joint meeting in April of 2022, I co-organized a session about career development for early career physician scientists, and we were talking specifically about K awards.

And Bill Kaelin who was in the audience, a physician scientist, and a strong advocate for career development, said that requiring a K award for a new hire is hardly a ringing endorsement to bring someone to your institution. Because, let's say, a department chair requires you to have a K award to get that position.

That K award is essentially paying for 75% of your salary. And ultimately, his point was that an institution should want to recruit you and should give you a startup package and the money for you to flourish, whether or not you have a K award. Unfortunately, that's really not true, and in many cases, a K award actually serves as your ticket to get your first faculty position.

So of course, that's a circular problem because you need data, papers, skills, and collaborators to get funded, but you also need the resources and time to get those things. Some of what we're gonna talk about today is actually how to structure that so you're successful in this early career job negotiation process.

Time alone isn't enough because a research day on the calendar doesn't move much without having access to data, maybe a coordinator or technical support. You also need a statistician, a facility, project funds, and mentorship. Thinking about how you're going to go about the negotiation for your first faculty position.

You actually wanna describe the program that you're thinking about building and what you expect in years one and two. If you're prepping for a K, then you'd wanna start drafting a specific aims page to make it concrete. And you're not trying to predict your results because of course your research doesn't work that way. You're trying to tie the time that you need in your research lab to realistic early milestones.

So, you might wanna learn a method, generate pilot data, or maybe you're trying to finish an analysis. You may also be submitting manuscripts, writing protocols, or preparing an application. After that, lay out what the work needs.

You might need effort, people, data, space, equipment, statistical assistance, and project funds. So, your current negotiation may entail actually working backward from the productivity that you expect to achieve back to the resources you need to get that. And that's ultimately what your chair is going to want you to answer.

They wanna put together a package that they think is going to make you successful based on your stated goals. You also wanna ask about the financial runway. How many years are they going to support the research portion of your research program? What percent of your salary is guaranteed, and when are you expected to start replacing it with grants?

And what if a grant is delayed or needs resubmission? Is there any opportunity for bridge funds to help you get through those critical delays? Also, does your protected time stay, or does your clinical load go up if you don't receive funding in an adequate timeframe? You wanna ask about internal career development programs or bridge awards because some institutions have K12 programs with mentor training and protected time, and that can vary by institution.

Now, if you're moving institutions, you also wanna build your transition into the plan. If you have a really great data bank set up or a biorepository at your institution, you may need to replicate all that infrastructure somewhere else, and that takes a lot of time, resources, and of course IRB review to get through.

You might need to hire people or set up a lab and also clinical and administrative systems. First-year milestones should also reflect all of the considerations above. You also wanna talk to recent hires because you wanna ask them if the percentage in their offer matches what they're actually doing in a real week.

How long did it take them to get the space, the staff, and the data that they were promised? Of course, talking to other people is not going to predict your job exactly because it really depends on how your department reads protected time once your recruitment is over, but it's a good way of assessing what's actually happening in reality.

One thing that's really important here is that the leadership matters. So, your mentor can advocate for what you need, but they may not control the reins of this process because ultimately that may lay with your direct supervisor, maybe it's a division head, or maybe it's a department chair. And they may call the shots about your clinic schedule, your RVU targets, salary support, or service coverage.

But someone with actual authority needs to know what was promised to you and be able to act. And it's so important that you get this in writing because what you are promised has to be specific enough that a stranger who takes over could read it and know what your percent and duration of research effort is, the remaining clinical duties, your source of support, and who is also reviewing the arrangement.

Because if a new chair takes over, you wanna make sure that whatever one person promised, the next person should still be able to deliver that. And you don't wanna be caught by surprise if your highly supportive chair decides to retire. That person might be replaced with someone who may not be as supportive of your particular career path, but you wanna know that what you're working on is going to be supported over the long term.

This is especially important in clinically intensive fields. In a study of surgeons who were doing basic science, clinical duties and no dedicated time were major barriers to success. And chairs said leaders have to actively shield early surgeon scientists from creeping clinical and administrative demands.

Even though the specifics differ by specialty, the core issues are the same. You need to be realistic about the clinical work, and someone with authority has to keep your research from getting displaced. In the third segment, let's talk about what happens when your time starts to erode. We all have good intentions, but even good arrangements can drift off over time.

So maybe a clinical volume changes, maybe a colleague leaves, and funding's delayed, and you might be asked by your department if you could add a clinic session, if you can cover more service or take on an administrator role. Those things might seem very simple and easy to agree to, but the problem is that your research time is rarely going to disappear all at once, but it shrinks through these types of decisions that all seem quite temporary, but over time you realize that wow, I'm actually spending a lot less time on the research that I'm supposed to be doing.

That's a key reason why the NIH wants your department to guarantee 75% research. When I was applying for my K award, the program director was really adamant that the department delineate what my clinical time was going to be spent doing because they really wanted to add up the percentages and make sure that it seemed realistic for me to spend 75% of my time on research.

And so, when I think about my own clinical schedule, I often think about my program officer in the background, almost like a little angel on my shoulder saying, "Hey, make sure to protect your research time. It's so important." So, step one, you wanna get a clear picture, so look at a few representative weeks.

How often were your research blocks interrupted? How much clinical work spilled into that time? Was there any new teaching or administrative duty that was added? And were the problems occasional, or has your whole job changed? I mean, is it different than what you first signed on to? Now, you're not gonna be tracking every minute, but you wanna get a vague feeling for what is changing over time.

And if something has really changed, you should start to objectively document that so that you understand really concretely what has become different from when you first took your job. Then you need to bring this to the right people. Of course, that's gonna be your mentor and also the person who actually has the authority to fix this problem.

So, you want to explain what's shifted, how it's affected the goals that both of you agreed on, and what needs to change to make your plan work again. There may be a number of fixes. Maybe, for example, you can work on better scheduling or more reliable coverage for the hospital or for your clinic if you have a critical experiment or a conference to go to. You may wanna be removing a responsibility. Maybe you serve on a committee that you say, "I just don't have time for this anymore." Or you might wanna adjust the goals or the timeline of your research if the original plan wasn't even realistic.

It's hard to get that sense ahead of time, but once you get into the swing of things in your faculty position, it might be clear what you actually have time to spend doing other things versus what you need to be doing to move your research program forward.

But what you don't wanna do is quietly absorb all this lost time for months and then assume you're gonna be able to make it up later. Once all that time has shifted and once you've moved away from building your research program, it's so hard to crawl your way back and to get back into the swing of things.

All of this is gonna hit your experiments, your data collection, manuscripts, grant deadlines, and eventually it's gonna also hurt your path to independence, which was explicitly the reason that your department chair probably recruited you in the first place. So you also wanna make sure that your goals are aligned with the department that hired you to do the job, and that's another reason why you really need to be laser-focused on protecting your research time and structuring the rest of your time so that the research program can flourish.

Now, the other difficult thing is that protected time isn't blank space, and so it's so difficult when you're coming up from training and you have a very busy, let's say, inpatient clinical schedule, or you have outpatient clinics as a resident or fellow, and then suddenly you get your faculty position and you have your one day a week of clinic, and the rest of those four days you have to figure out what to do.

Some people, when faced with that, they start to schedule all those days, and so they might put time in for writing a grant or for reading manuscripts or for setting up one-on-ones with their, uh, team. And that's a great way to define your day so that you don't just have all this blank space. Some people like a blank schedule where they can plug things in as they come up, but you have to just be very careful because that blank time can fill up with things that may not actually be conducive to building your research program.

And it's really hard to manage your open time because you need to be building a program, forming collaborations, hiring people, learning new systems. You also have to decide what deserves your attention first. And if you're the kind of person that has difficulty saying no, you could be filling up that blank time really easily so that in a couple of weeks you may have actually no more blank time in your schedule because it's full of meetings and collaborations and things like that.

You have to have goals that fit your stage of training. You wanna have regular check-ins on your progress because you need to keep your work focused, and you have to make it easier to show what's being displaced when your time changes. Accountability is fair, but it also has to come with mentorship, resources, and realistic expectations.

And slow progress shouldn't automatically become a reason to add your clinical work. So for example, if your research program is taking a long time to build, you say, "Oh, I could just take on an extra clinic while my research program is building." That's not what you wanna do. You want to make sure that you have the research program and the time needed over years to be successful.

And if the research environment wasn't really in place from the beginning, then it's gonna be so hard to be successful down the line. The fourth segment is talking about why it matters, and we'll talk a little bit about the data here.

We know that this is a real problem for people at this stage. Our national survey from the American Junior Investigator Association showed that 63% of early career physicians scientists named balancing clinical and scientific work as a major career challenge. In a 2026 survey from the American Board of Internal Medicine Research Pathway graduates, they noted that funding instability, financial concerns, and a lack of protected time were still major concerns. When people were asked why people are leaving physician scientist careers, 32% cited more clinical and administrative duties and a lack of protected time.

None of that is really surprising because the clinical time, the administrative duties really build, and they interfere with us being successful in our own research careers. But protected time is not going to guarantee that your project works or that your grant gets funded. So I'm sorry to disappoint you, but your success in the lab can require hard work and sometimes a sprinkling of luck as well.

But without usable time, even a strong idea and a committed investigator might never get the chance, and you wanna set yourself up for success at the beginning.

To summarize what we've discussed today, before you accept your offer, you wanna look past the percentage. It's not just the 75% or 80% of protected time, it's whether the clinical load, the schedule, funding, resources, and leadership all back the same commitment from the institution that's hiring you in that position.

And once you're in your role, you wanna notice when the alignment is starting to drift. Be clear about your progress to your mentor and your supervisor and raise problems before your lost time becomes the normal structure of your job. Research careers are hard enough without doing the research part almost entirely after hours, and that's not really what you signed up to do.

So, the three key ingredients that I've outlined here is that you need to have a strong mentor who gets who you are and what you need. You need to have departmental support from the top so that you know that your research matters to your department's mission. That's so critical to know that within your department your program is going to be supported. And you also need to have funding to buy back your clinical time so that you can focus on the growing program.

But what I think is actually most important, and it's probably under-emphasized, is that you have to be your own advocate. No one's gonna advocate for you as strongly as you will. You need to have a vision for what you wanna do with your time, and I want you to think big

because you need to map out the next few years of your research program, not just the first few months or first year, but actually where you see this program going over the early part of your career.

You wanna chunk that into smaller milestones along the way to hold yourself accountable so that you can see yourself making progress.

And always remember, your lab is not going to be built in a day, so play the long game and you're more likely to achieve success.

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We'll see you next time.