

Stakeholder: R1 University Research Lab

Roles BME students take in their organizations? Graduate student & undergraduate research assistants

Job Title	Description	
Masters Student	Work on a directed research project for a semester or a year	
PhD Student	Independent research culminating in a thesis	

What technical skills do they look for in BME students?

		Expectation Level		
Job Title	Skill	MS student	PhD student	Undergrad Research Assistant
Lab member (MS, PhD, undergrad)	Skill Coding (Matlab and LabView):	MS student Having actually completely a semi-independent project using Matlab and Labview (could be from a research project, work at an internship, a design course). Especially important for students rotating in his lab for a semester or two because of limited time to learn new skills. Labview specific experience is especially important, since it's very different from other coding languages. His lab uses Labview to control experiments and data acquisition.	PhD student Less essential since PhD students would have time to learn necessary skills if they are motivated/passionate enough about the project (he has hired students who have only had introductory courses and no practical experience with coding)	Undergrad Research Assistant Some experience with Matlab and/or LabView (class experience is fine) for certain projects. Role the undergraduate research assistant will play depends on their own goals/interests. Some who apply are excited about specific projects/research. Some are explicit about the fact that they just want some research experience before medical school and have no interest in writing an honors thesis.



Stakeholder: R1 University Research Lab

What soft skills do they look for in BME students?

Soft Skill	Description		
Ability to work independently	 Know when they should be figuring something out on their own (resourcefulness) Know when they can't and need to ask for assistance This was his answer to "Are there any skills you wish people applying to your lab had more of? In an ideal world, what skill do you wish every student applying to your lab had" 		
Teamwork experience	 Experience working on a team to solve a problem of some sort (i.e. a design project, research) 		
Meticulous/organized	 Careful thorough recording More important for PhD students and lab tech. He contacts previous employers/lab PI's and asks them if they felt they could rely on the student/trust their data, if they felt like they needed to reconstruct what the student did after they left, or if they left a good 		

Notes (Note any additional points that were discussed, but not covered above):

Q: Have you ever had a bad experience with a graduate student/anyone you've employed?

A: Yes, one person who did the bare minimum for directed research credit. One who was very invested and excited about their project but lacked the coding skills to make it happen.

Not a lot of students (virtually no one) come in with strong scientific writing skills.