



NATIONAL SOCIETY FOR
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HOW YOU CAN TRAIN CLINICAL STUDENTS WITHOUT FEELING OVERWHELMED

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THE PARADOX OF CLINICAL STUDENTS

It's a paradox histology lab supervisors are all too familiar with. The lab is short-staffed, everyone's working hard, and you need more staff. Taking on students, trainees, new employees, or cross-training might help in the long run, but it's hard to dedicate the time and effort.

Clinical students or cross-training does take time. It's easier for a bench tech to get their work done when they're not explaining what they're doing, and a trainee or student won't be as fast as an experienced tech. Patient care comes first, and it's easy to decide that you don't have the ability to take on a student.



DON'T SAY "NO" RIGHT AWAY. THINK ABOUT THE BENEFITS

By declining students for clinical rotations, you could be missing out on a huge opportunity. A student rotation can be looked at as an extended job interview. You get to meet the student and observe how they interact with other employees, get a sense of their personality and fit, and start teaching them how your lab does things.



You can think of it as a “trial period” for your next employee.

Not only is it a benefit for the student as a potential employee, but it's also a benefit for your current employees too. Mentoring or teaching a student is a valuable experience. Bench techs can improve their own knowledge and skills by training – they say the best way to learn is to explain it to somebody else. It's also a great note for employee evaluations, and you might find that some of your employees become more passionate and enthusiastic about their work when they get the opportunity to share it with a student.

There's a huge shortage of histology lab professionals, and graduating students is necessary for the next generation of histotechnicians and histotechnologists. You have a chance to help fill the need for more histology professionals. Wherever that student goes, and whatever they do, your lab helped them become successful – and that's a great feeling.

THERE ARE REAL, ACTIONABLE THINGS YOU CAN DO TO MAKE IT EASIER TO HOST STUDENTS

There are ways to make student clinical experiences easier, less time-intensive, and even helpful for your lab and employees.

- 1 Evaluate Your Workflow & Equipment**
- 2 Start Building A Teaching Collection**
- 3 Develop A Training Plan**
- 4 Encourage Active Participation**

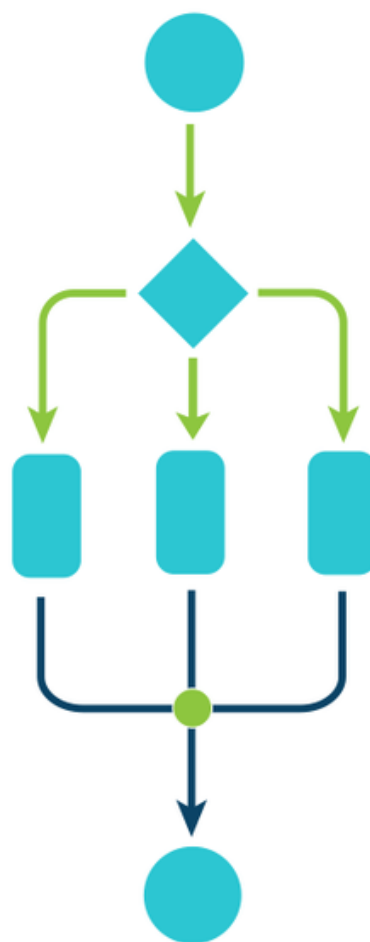
By taking some time to develop a training plan that fits your lab, your employees, and your workflow, you can improve the learning experience while avoiding overwhelming yourself or your employees. Ultimately you will make positive changes to the culture of your lab and the entire field.

1 EVALUATE YOUR WORKFLOW AND EQUIPMENT

If you have students, agreed to take on students, or considering accepting students, the first step is to evaluate your workflow and equipment. You can do this at any time and reevaluate as necessary.

Ask for copies of the learning objectives and discuss the expectations for student clinical experiences with the program director and faculty for the program. What are the most important things they want the student to get experience with? What objectives would they like the student to complete? Once you know the student's goals then evaluate your lab's workflows.

When are your employees the busiest? For most histology labs, the morning run is the largest. Embedding during the morning run might be too much for a teaching experience, but slower after that. The special stains bench might be fairly slow in the mornings and more active in the afternoons.



1 EVALUATE YOUR WORKFLOW AND EQUIPMENT

Employees aren't the only consideration. You might need all your embedding stations in the morning, but only one or two are in use in the afternoon. If there's a free microtome or embedding station at certain times, take note. When does daily or weekly maintenance get done? That's a great way for a student to get familiar with a piece of equipment.

Bring your supervisors and administration into the discussion. What are the limits of what you can do with a student? What paperwork needs to be completed before the student can start clinical rotations? How do you capture or record the effort you and your staff are putting into this? Many facilities have methods in place to record time spent teaching or mentoring, especially at hospitals with resident programs or nursing programs. You might be pleasantly surprised to find that you can get FTEs or workload credit for student instruction.



2 START BUILDING A TEACHING COLLECTION

You don't need to constantly be looking for something for a student to do. With minimal effort, you can start putting together a small collection of samples and cases that make for great learning experiences.

Talk to the grossing department. While they gross some of their specimens, they could make an extra cassette or two with very little effort, just like many labs already do for control blocks. Extra cassettes of placenta, breast samples, colon, appendix, gallbladder, or other organs can be great for teaching. Larger specimens might be useful for making an entire set of training blocks. Before disposing of a grossed sample, you could section off some extra cassettes and label them by source.

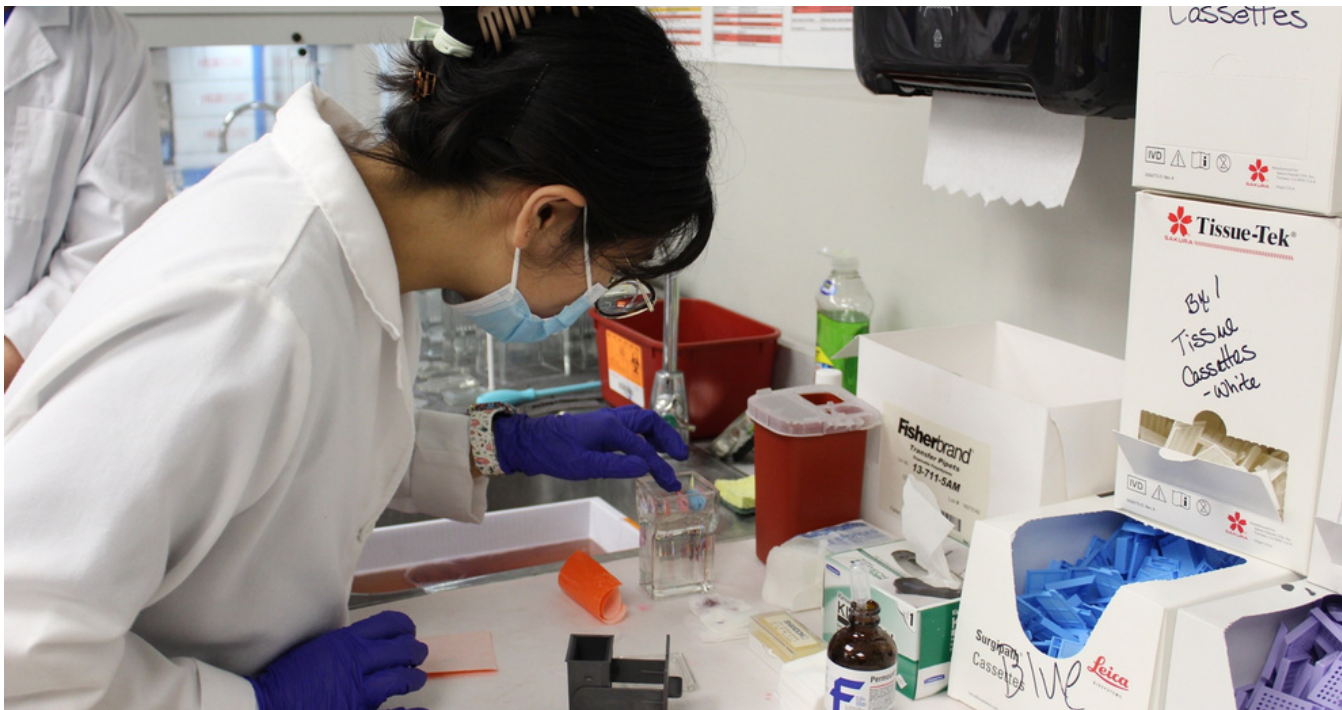
As you clear out old blocks for disposal, think about keeping some for training purposes. You don't have to keep a huge collection, but a few blocks with different types of samples can be put aside and used to train. This is great for extra samples of small biopsies and specimens that are grossed and processed en toto. If you have a block that has special staining, think about cutting extra slides. You can compare the stained slide with a student practice slide later.

2 START BUILDING A TEACHING COLLECTION

Do you have expired reagents? Use them! Expired reagents aren't suitable for patient specimens that are used for diagnosis, but you can still use them for training. If you find something expired, mark it clearly as "For training purposes only" and put them aside.

Students can help! This doesn't have to be done entirely by employees during their regular work. Sectioning a specimen, filing and sorting old blocks, cutting extra slides and checking expiration dates is just as useful for teaching as the finished product.

At this point, we're making lists of what we could do, and coming up with ways to smoothly incorporate it into our daily work.



3 DEVELOP A TRAINING PLAN

Just because a student is initially scheduled for certain hours, it doesn't mean you have to keep those exact hours. Talk to the program director about flexibility for times and days. You might even be able to mix it up a little bit. Have a student come in early to observe the morning run for a couple of days, then have them come in later on other days to do hands-on practice when it's less busy.

Use the student evaluation as a guide. Student evaluations can help guide the training. You don't have to wait until the end to start using them. Check with the trainer and the student on a regular basis. Take a few minutes at the end of the day or the end of the week to go over the evaluation objectives with the trainer and student, and take some notes. You can use them to arrange extra practice, look for extra opportunities, and they'll make writing the evaluation at the end much easier.



3 DEVELOP A TRAINING PLAN

Once you have a good idea of your workflow, capabilities, and objectives, you can start working on a training plan.

Any employee or student has required documentation. Build a training folder for your student. Have a space to keep track of orientation, required training and inprocessing, schedules, proficiency assessments, evaluations, and any other documents you might need. When the student is finished, you can file the paperwork away and reuse the folder for the next one.

Everyone needs to go through initial training, competency assessment, and proficiency testing. You don't need to reinvent the wheel!

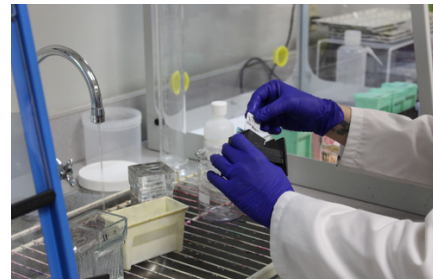
The standards and documentation you use for a new employee can be just as useful for teaching. This might even be a chance to improve your competency assessments. The learning objectives and evaluations you can get from the program directors could work just as well for a competency assessment.

Individual practice time is important for students. You can't learn to cut or embed from a book, and classroom lab time is limited. There's a great benefit to blocking off time for practice – they don't always need somebody hovering over them the entire time. As long as somebody is available to answer questions or assist as needed, that counts as “supervised”. Sit them down at a microtome with a stack of blocks, and let them know that they can always get advice if they need it. Place students in situations where they can learn through participation without overwhelming your bench techs. When staff are busy with their own tasks, allow the student some time for individual practice.

4 ENCOURAGE ACTIVE PARTICIPATION

Keeping a student engaged can be a challenge sometimes. When work is taking up everyone's attention, the student might feel that they're "in the way", and that asking for help or something to do is a bother. If you notice that the student is standing around, there are some ways to pull them back in without taking up too much time or effort.

- A student can help, even in the busiest moments. Filling slides and blocks is as much a part of our job as any other, and just as important. It's not just "busy work" to sort patient specimens and file them in the correct positions, retrieve specimens for recuts and special stains, or to deliver blocks and slides between benches or to the pathologists' boxes. In fact, it's helpful for the student to learn the workflow by experiencing it.
- Regular maintenance, QC, and organization is part of our job too! When it's time for the daily, weekly, or monthly maintenance of your equipment, bring the student along! It's a great way to familiarize them with the equipment. Having them check for expired reagents or perform an inventory count helps them know how and where things need to be stored and accounted for.
- That principle of "the best way to learn is to explain it to somebody else" works for the students too! Ask them to research the SOPs and reference books, and prepare a brief explanation or summary of a particular stain or procedure. You might even get some new job aids or "cheat sheets" that can help your bench techs for rarely performed procedures.



Standard Operating Procedure

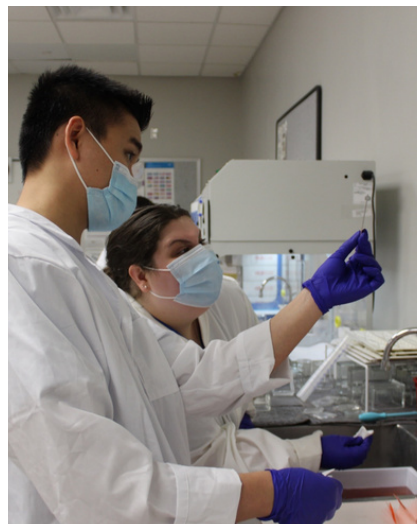
Date: _____
SOP Title: _____
Principal Investigator: _____
Room and Building: _____
Lab Phone Number: _____

Section 1 – Process

4 ENCOURAGE ACTIVE PARTICIPATION

- Student clinical rotations aren't necessarily done every day. If somebody notices an interesting case or good teaching specimen, make a note of it and bring it out when the student is there. Some good examples are:
 - blocks with calcifications that need surface decal
 - blocks with unusual orientation notes for embedding
 - blocks with specific panels or slides that need to be cut, or specimen sources you don't regularly get.
- Troubleshooting or QC notes can be a great learning tool as well. If there's something wrong with a sample, keep the old one. Have the student go over the QC notes and view the slide or block so they can understand how to avoid or fix that issue in the future. If you need to reembed or back a slide up while the student isn't there, consider taking a quick picture with a mobile device or microscope camera.

Students are usually eager and attentive. Keep them involved in their own education. Ask them what they feel they need more practice with, and how they feel they're doing. A student perspective can also be a fresh perspective. You might find that a question about why something is done a certain way could lead to an improvement in your procedures or processes that benefits everyone!



KEEP COMPLIANCE IN MIND – WATCH OUT FOR PITFALLS

There are some things to watch out for when taking on a student. It's important to make sure that clinical rotations don't lead to bad practices or a potential violation of regulations or policies.

PROTECTING PATIENT CONFIDENTIALITY IS A MUST.

Make sure that your students are aware of that. A picture of a stain or block is a great learning tool, but make sure that students know that there can be no patient information on any of them. Discuss with the student how pictures, descriptions, or social media posts might inadvertently expose patient information. Students should always ask before taking pictures of anything. If you make extra learning blocks or slides, consider having a separate labelling system for them. Some clinical sites have a mock patient file in their LIS that they use for labelling teaching slides and blocks.

A NAACLS accredited program is required to have a “service work” policy which places limits on how and when a student may perform work. A student cannot be used as a replacement for an employee. Many programs have policies about paid work as well. Check with the program director about their policies – if the student is an employee in your department or another department at your facility, they may have to be “off-duty” while performing clinical rotations.

That doesn't mean that a student can't handle patient specimens – they can! As long as the student has been appropriately assessed for proficiency, a student can work with patient specimens with proper supervision. Keep those proficiency assessments filed away in case they're needed.



HAVING CLINICAL STUDENTS CAN TAKE SOME EFFORT, BUT IT DOESN'T HAVE TO PREVENT YOU FROM TAKING THEM

There's no way to host a student that's completely seamless. It still takes time and attention. But it doesn't have to be so much of a burden that having a student is impossible. By taking a little time to develop a plan that takes your workflow and lab into account, you might find that it's much less of a disruption than you'd think, and a joy to share your knowledge with a student who is eager to learn.

TALK REGULARLY WITH THE PROGRAM DIRECTOR OR CLINICAL COORDINATOR, AND BRING THE STUDENT, STAFF, AND ADMINISTRATION INTO THE DISCUSSION. DISCUSS EXPECTATIONS, LIMITATIONS, PROBLEMS, SUCCESSES, AND NEW IDEAS. ASK FOR, AND PROVIDE FLEXIBILITY WHILE SCHEDULING AND TRAINING STUDENTS. IF SOMETHING ISN'T WORKING FOR YOU OR YOUR LAB, TRY TO COME UP WITH ALTERNATIVES.

Having students perform clinical rotations is a huge benefit to everyone involved. The students get real-world experience, the program is able to develop more and better-qualified graduates, and you might meet your next star employee! It's a richly rewarding experience to see a student grow, develop, and gain a new understanding and passion for the work we do. Hosting student clinical rotations is an investment for the future of that student, your facility, your community, the pathology field, and healthcare as a whole. One student can change the lives of thousands of people throughout their career, and part of that success will be thanks to you and your lab.