Purpose

The apprentice program provides an opportunity for undergraduate students to further their anatomy education at the University of Utah. This is a one semester appointment that allows twenty-four outstanding students to expand their knowledge in anatomy. Through weekly participation as lab instructors, the apprentice teaching assistants gain a greater knowledge of the anatomy they learned as students, while becoming more competent teachers and communicators. In the lab, the apprentice teaching assistant teaches a wide spectrum of anatomy using prosected cadavers. This is a tremendous learning opportunity to which the old maxim applies, “Qui docet discit,” or in other words “he who teaches learns.”

Besides learning more anatomy, the apprentice teaching assistant trains in the art of effective teaching. This is a valuable way to develop competency and skill in communication. Good skills in communication and teaching are valuable commodities in all aspects of life.

The apprentice position spans one semester, therefore make the most of this experience. Following are guidelines, commitments, and responsibilities that will help the apprentice to achieve the most out of this experience.

Time Commitment

This program requires a significant time commitment. Each week the apprentice will teach one lab session, including preparation or clean up; attend a two-hour staff meeting; participate in an advanced anatomy colloquium; meet with a mentor teaching assistant to prepare for the lab; and individually study the material. Additional commitments include: proctoring examinations, grading examinations, and attending review labs. The table at the top of the next page is an approximate summary of the time involved each week.

The bottom line — good teaching requires time. To gain the maximum benefit from this learning experience it is not wise to overextend yourself. Working full-time, while taking a heavy schedule of classes, is not conducive to optimizing the apprentice teaching assistant opportunity. Past experience shows that those who get the most out of the apprentice teaching position are those who can put the necessary time into it.
Lab Session Responsibilities

Each apprentice teaching assistant receives a lab section that fits his or her course schedule. Apprentices must attend this lab section weekly throughout the semester prepared to teach the designated anatomy. It is the apprentice’s responsibility to be prepared to teach the anatomy the students are required to learn. The apprentice should be well prepared to present the demonstrations and should have practiced these in advance of the lab session.

Apprentices assigned to 12:55 labs must arrive one hour early to help the mentor teaching assistants prepare the lab for the day. This hour of preparation includes getting out body parts, organizing the lab, placing quiz paper on each desk, etc.

Apprentices assigned to 2:50 and 4:45 labs must arrive 10 minutes early. At this time they should help get quiz paper out for the next lab, spray and cover the body parts, and help organize the lab for the next session. At the end of lab they should repeat these steps in preparation for the next lab.

Apprentices in the 6:40 labs must participate with the mentor teaching assistants in cleaning up the lab after the students leave. This involves putting away the cadavers, cleaning the demonstration trays, and cleaning the laboratory (sinks, desktops, etc.) for the next lab or next day. This will take approximately a half-hour to forty-five minutes.

Preparation

Preparing to teach in the laboratory is a three step process:

1. Attentive attendance of the weekly staff meetings. During these meetings we discuss the upcoming lab objectives and goals. As a staff we attempt to analyze teaching techniques and approaches that will help us meet our objectives and best serve the students. Read the upcoming lab’s section in this manual. Think about that lab session when you were involved as a student. Then come prepared to discuss what we as a staff can do to make this lab most effective for the students.

2. Meet once a week with the teaching assistant assigned as your mentor. This meeting should occur at least one day...
before your assigned lab. This meeting must not occur the morning of the day you teach the lab. This session allows the apprentice teaching assistant to give the lab demonstration to the mentor teaching assistant before giving it to the students. The mentor can then provide the apprentice with constructive feedback and advice on the organization and presentation of the demonstration. This also allows the mentor teaching assistant to share effective teaching and demonstration techniques with the apprentice. Apprentice teaching assistants should review the pertinent anatomy before this meeting and come prepared with an outline of how they intend to present the demonstrations. If the apprentice does this, this session can focus on teaching technique, presentation skills, and additional anatomy knowledge instead of on getting you prepared on the basics. The basic preparation and knowledge is your responsibility.

3. Personal study and preparation. All teaching assistants working in the lab should come prepared with a firm knowledge of the material the students receive in lecture. Apprentices should prepare personally prior to the weekly staff meeting and prior to the meeting they have with their mentor teaching assistant. During this personal preparation, outlines of demonstrations should be made and anatomy knowledge should be thoroughly reviewed.

Weekly Staff Meetings

This is an opportunity for all staff members to prepare to be better anatomists and teachers of anatomy. Apprentice teaching assistants should attend the meetings prepared to discuss how to become competent, effective teachers in the laboratory environment. Bring any questions or constructive comments to the meeting for discussion. Apprentices will benefit and enjoy the meeting more if they become involved in its process. All input is valuable and could lead to improvements in the course.

During the meeting apprentice teaching assistants will have an opportunity to participate in a teaching capacity. In most meetings throughout the semester each apprentice will get to present a formal demonstration to other staff members. A schedule of these teaching assignments will be handed out at the first staff meeting.

The Apprentice TA Demonstration

This course has achieved success because the teaching staff is constantly undergoing evaluation. This evaluation includes student evaluation, peer evaluation, and self evaluation. Constructive criticism is a very powerful tool. Only through critical evaluation can one improve. One of the valuable experiences this program provides is the opportunity to do a lot of teaching. The apprentice’s teaching begins each week with the demonstration given to peers in the staff meeting.

The purpose of this demonstration is to provide a teaching experience that is evaluated by a group of experienced colleagues. This teaching demonstration lasts approximately 8 to 10 minutes. This is followed by a 4 to 5 minute discussion that critically assess the demonstration. Aspects of the demonstration that were done well will be pointed out, as well as items that require improvement or need additional thought. Being receptive to this sort of critical commentary is essential to becoming a better teacher. All teaching assistants can learn and benefit from these discussions.

This demonstration during staff meeting is not meant to cover a complete rotation in the lab, as this cannot be accomplished in the allotted time. Since your demonstration will not last as long as the one you give during lab, it need not cover all the material. You should recognize the time constraints involved in your demonstration and organize the demonstration to fit within the time limits. Anyone can be a good teacher given the luxury of unlimited time, we however must be
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good teachers within limited time frames — this requires extreme preparation.

It is the apprentice’s responsibility to use appropriate prosections. Apprentices are encouraged to meet prior to the meeting and look at the appropriate parts that will be used. You should organize the material into a concise, sequential presentation, with logically flowing transitions from topic to topic, body part to body part, and structure to structure. Strive to use good demonstration skills as you show structures on the body parts. Your demonstration should have a brief introduction, an organized demonstration, and a brief conclusion.

Apprentice and Mentor Meeting

To facilitate the apprentice teaching assistant’s learning and preparation process, each apprentice teaching assistant will be assigned a mentor — a more experienced teaching assistant. The apprentice will meet with their mentor at least once a week for 2 to 3 hours (or as long as is necessary to satisfactorily meet the teaching requirements for that week’s material). The purpose of these sessions is:

1) the development of organized, effective, concise demonstrations;
2) the discussion of effective teaching techniques;
3) the review of demonstration techniques and methods;
4) and most important - TEACHING PRACTICE!!!!!!!

Apprentice teaching assistants are expected to have a competent knowledge of the anatomy for the coming lab prior to meeting with their mentor teaching assistant. This allows time and emphasis to be placed on the above stated objectives rather than on review of the required anatomy. The meeting is designed to be a highly interactive environment, where the apprentice can ask questions and suggest innovative ideas, while gaining critical feedback from the mentor teaching assistant.

At each meeting the apprentice should come prepared with outlines of each demonstration to be given in the lab. During this meeting the apprentice will teach each of the demonstrations to the mentor teaching assistant. This is the most effective way to become a better teacher. Practice, practice, practice.

This weekly preparatory meeting is absolutely vital and should not, under any circumstances, be missed. Failure to attend has two consequences: first, the apprentice will not have achieved a level of preparation acceptable to this program, thus, jeopardizing the education of the students; second, because of this the apprentice will not be allowed to present demonstrations in the laboratory during that week, consequently missing a valuable experience.

Proctoring and Grading Exams

During the semester apprentice teaching assistants, along with the mentor teaching assistants, will grade and monitor examinations. These are responsibilities that demand concentration and care. Refer to the chapter on grading and proctoring examinations for more information. The time involved in these activities will average out to approximately an hour or two per week over the entire semester.

Anatomy Colloquium

All teaching assistants, both mentor and apprentice, are required to attend the anatomy colloquium. This occurs every Friday afternoon from 2:15 to 3:15 PM. This is an opportunity to learn more anatomy, something I believe to be paramount to good teaching. This is a graded course for which a teaching assistant may register for one hour of credit each semester. Teaching assistants do not have to register for the credit, but whether they register or not they still must attend the colloquium.
Purpose

The mentor teaching assistant program provides an opportunity for undergraduate students to further their anatomy education at the University of Utah while receiving a teaching stipend. The term of the position is for an academic year. This may be terminated short of this period and can be renewed for additional year periods.

This is a job, albeit a great job, but nonetheless a job that carries much responsibility. It affords undergraduates an exceptional opportunity to become outstanding anatomists, accomplished teachers, responsible leaders and trainers, while requiring them to fulfill necessary work assignments for the maintenance and upkeep of a busy anatomy laboratory. I consider the mentor teaching assistant to be an extension of myself. Great confidence and trust is placed in this position.

This chapter outlines the commitments and responsibilities of the mentor teaching assistant. It is the mentor’s job to fulfill these responsibilities. The mentor teaching assistant should also review and be familiar with the responsibilities of the apprentice teaching assistant, as you will be their trainer and will need to help them understand their responsibilities. One of the most important roles of the mentor teaching assistant is to help train and prepare the apprentice teaching assistants as they strive to become competent teachers in the laboratory.

Time Commitment

Accompanying this paid position is a series of required responsibilities throughout the semester. Each week the mentor teaching assistant teaches three labs, one of which they are responsible for its administration; trains apprentice teaching assistants; attends a weekly staff meeting and colloquium; and performs weekly maintenance work in the lab. Additional commitments include: proctoring examinations, grading examinations, attending review labs, and participating in the end of the semester lab clean-up. The table at the top of the next page is an approximate summary of the time involved each week.
The bottom line — running a quality program requires significant time and effort. To a large degree the quality of the anatomy laboratory is a reflection of the mentor teaching assistants’ time and effort.

### Lab Session Responsibilities

Each mentor teaching assistant is assigned to teach in three lab sections, one of which they are responsible to administer. Mentors must attend these lab sections weekly throughout the semester prepared to teach the designated anatomy. It is the mentor’s responsibility to be prepared to teach the anatomy the students are required to learn.

Each mentor teaching assistant is in charge of administering one of the lab sections. This requires the mentor to introduce the lab each week, prepare a weekly quiz, grade the quizzes, maintain the grades on the computer, work with the apprentice teaching assistants assigned to that lab, proctor that lab’s practical exam, and be generally responsible for the flow of the lab.

Mentors assigned to 12:55 labs must arrive one hour early to prepare the lab for the day. This hour of preparation includes getting out body parts, organizing the lab, placing quiz paper on each desk, etc.

Mentors assigned to 2:50 and 4:45 labs must arrive 10 minutes early. At this time they should help get quiz paper out for the next lab, spray and cover the body parts, and help organize the lab for the next session. At the end of lab they should repeat these steps in preparation for the next lab.

Mentors in the 6:40 labs must participate in cleaning up the lab after the students leave. This involves putting away the cadavers, cleaning the demonstration trays, and cleaning the laboratory (sinks, desktops, etc.) for the next lab or next day. This will take approximately a half-hour to forty-five minutes.

Mentor teaching assistants must fully attend to each lab assignment as outlined above. It is not just the responsibility of the mentor teaching assistant

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours per Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab - teaching, setting up, cleaning up, etc.</td>
<td>6</td>
</tr>
<tr>
<td>Staff meeting - Friday 3:30 to 5:30 PM</td>
<td>2</td>
</tr>
<tr>
<td>Anatomy colloquium - Friday 2:15 to 3:15 PM</td>
<td>1</td>
</tr>
<tr>
<td>Training - meet with apprentice TA</td>
<td>2 to 3</td>
</tr>
<tr>
<td>Personal preparation/administration</td>
<td>2 to 3</td>
</tr>
<tr>
<td>Grading, proctoring exams, etc.</td>
<td>variable</td>
</tr>
<tr>
<td>Work assignments</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>14 to 16</td>
</tr>
</tbody>
</table>
in charge of the lab and the apprentice teaching assistants to fulfill these responsibilities.

It is the mentor teaching assistant’s job, for which money is being paid, to fulfill assigned lab sessions. If, for some reason, a session must be missed it is the mentor’s responsibility to find a replacement for that session and pay the replacement $15.

Preparation

Preparation for labs is just as important for the mentor teaching assistant as it is the apprentice. One of the easiest habits for mentor teaching assistants to fall into is thinking they are prepared because they have done it before. When this becomes the modus operandi, you cheat yourself and those you teach because you are not allowing yourself to be as good as you possibly could have been with the proper preparation. It is true that the amount of preparation diminishes with experience, but never overlook the power of self evaluation in preparing anew each time you come to lab.

It is also easy to become lulled into complacency as one becomes more competent with their job. There is no room for this attitude in the teaching arena. Remember, even though you know a lot of anatomy, you have only scratched the surface. Great teachers never quit being students. Try the following challenge: learn something new about anatomy each day. It will not take that much time and it will enhance your teaching abilities, especially if you think critically about the new things you learn.

Weekly Staff Meetings

This is an opportunity for all staff members to prepare to be better anatomists and teachers of anatomy. The primary objective of the meeting is to introduce, review, and prepare for the upcoming week of labs. The meetings are often review for mentor teaching assistants, but a new experience for the apprentices. Because of this, the mentor teaching assistant has a very important role in the meeting. That is — the role of a mentor.

One of life’s greatest teachers is experience. Mentor teaching assistants all have experience in teaching the labs. If this experience can be shared with the new teaching assistants then the slope of their learning curve can be reduced, producing a more effective teaching staff. It is the mentor teaching assistants responsibility to attend and actively contribute at the staff meeting. Share your experiences, be a positive role model, and help the apprentice teaching assistants become assimilated into our teaching staff.

Mentor TA Demonstration

During the first staff meeting mentor teaching assistants will have the opportunity to present demonstrations to their colleagues. The objective of this demonstration is to show exemplary teaching skills to the apprentice teaching assistants. For this reason, it is important to be well prepared. A subset of the lab material should be selected that allows the mentor to clearly demonstrate anatomy and the teaching skills to present that anatomy. This should be thought out in advance, not just presented on the spur of the moment. Remember, the example starts with you.

Apprentice TA - Mentor TA Meeting

To facilitate the apprentice learning and preparation process, each apprentice teaching assistant will be assigned a mentor — a member of the regular teaching staff. The apprentice teaching assistant will meet with their mentor at least once a week for 2 to 3 hours (or as long as is necessary to satisfactorily meet the teaching requirements for that week’s material and assure that the apprentice teaching assistants are ready to teach the students). The purpose of these sessions is:

1) the development of organized, effective, concise demonstrations;
2) the discussion of effective teaching techniques;
3) the review of demonstration techniques and methods.

The mentor teaching assistant is responsible to see that the apprentice accomplishes these goals and is ready to enter the lab.

There is no one-right-way for this meeting to occur. Individual discretion is left up to the mentor teaching assistant as to the proper approach to meet these goals. Although there is no dyed-in-wool, cut-in-concrete, or carved-in-stone process to follow, there is one guideline that everyone must follow, that is, I want the apprentices to teach the mentors the demonstrations at this meeting. Practice, practice, practice is the goal. The only way anyone can become a better teacher, is by teaching. This meeting should involve apprentices teaching their mentors and the mentors giving them constructive feedback and advice.

**Proctoring and Grading Exams**

During the semester apprentice teaching assistants, along with the mentor teaching assistants, will grade and monitor examinations. These are responsibilities that demand concentration and care. Refer to the chapter on grading and proctoring examinations for more information. The time involved in these activities will average out to approximately an hour or two per week over the entire semester.

**Work Assignments**

As part of their paid position, all mentor teaching assistants participate in work assignments necessary for the proper upkeep and maintenance of the anatomy laboratory. These work assignments are as important a part of your position as is teaching in the lab. They should be taken seriously and accomplished efficiently and on time. The assignments are made during the first staff meeting of each semester. For more information, see the section on work assignments in this manual.

**Anatomy Colloquium**

All teaching assistants, both mentor and apprentice, are required to attend the anatomy colloquium. This occurs every Friday afternoon from 2:15 to 3:15 PM. This is an opportunity to learn more anatomy, something I believe to be paramount to good teaching. This is a graded course for which a mentor teaching assistant may register for one hour of credit each semester. Teaching assistants do not have to register for the credit, but if they do not register they still must attend the colloquium.
The staff meeting is a multipurpose meeting. The principal focus of this meeting is to prepare for the upcoming week of labs. Its emphasis is directed at helping the apprentice teaching assistants initiate their preparation and understanding of the labs. At the same time it provides a chance for all staff members to prepare, reevaluate, and discuss how to improve as teachers in the anatomy lab environment. Coincident with these objectives is the discussion of any business necessary for the smooth and coordinated operation of the course. Much of the ongoing improvement to the course begins with discussions and debates at these meetings.

The staff meeting is mandatory for all staff members. We have much to accomplish during this meeting, so it is important that people arrive on time. Every effort will be made to start the meetings promptly.

The meeting proceedings may be outlined as follows (the times are approximations and may vary):

3:30 PM — Meeting begins.

3:30 to 4:30 PM — Teaching preview of next week’s labs. Four eight minute presentations followed by five minute discussions.

4:30 to 4:35 PM — Teaching preview clean-up. All staff members should chip in and get things put away as quickly as possible so we can continue with the meeting.

4:35 to 4:45 PM — Discussion of past weeks labs. Were there any problems? What should we be aware of? Did any questions arise about anatomy?

4:45 to 5:05 PM — Discussion of lab objectives, teaching skills, and lab improvement.

5:05 to 5:15 PM — Teaching topics or general teaching discussions

5:15 to 5:30 PM — Staff business.

I strongly encourage all staff members to come prepared to participate in these meetings. One might legitimately ask, “How do I come prepared to participate in the meeting?” The following ideas might help.
First, be aware of the proceedings outlined above. If you realize what will occur you can better prepare to participate. For example, note that one of the first things we will do each week is discuss the previous week’s labs. With this in mind you can think about how labs went during the week and come prepared to discuss problems and present ideas for solutions and improvements.

Second, it is important that you prepare for any teaching episodes you might have during the lab teaching preview. This will require that apprentice teaching assistants come in prior to the meeting to organize and study the body parts they will use for their demonstration. It will require that mentor teaching assistants, even though more experienced, still prepare to present excellent example demonstrations when it is their turn.

Third, a few tips. It is easy for apprentice teaching assistants to just sit back and listen, thinking there is nothing of significance that they can add amidst the more experienced staff members. This is the farthest thing from the truth. Many of the great ideas for improvement over the years began with suggestions from apprentice teaching assistants. So be bold and participate. It is just as easy for mentor teaching assistants to sit back and observe. Usually, not because of intimidation, but rather because of apathy. There is no room for apathy on my staff, besides you are here because I value your contribution and expertise. So please come prepared to share it.
The anatomy colloquium is an advanced forum designed to elevate the knowledge of anatomy teaching assistants. The course is held each Friday, in conjunction with the anatomy staff meeting, from 2:15 to 3:15 PM. All current anatomy staff members are required to attend, also any past teaching assistant may attend the colloquium.

The colloquium attempts to enlarge the basic anatomy knowledge of the teaching assistant by exploring topics in anatomy that go beyond the knowledge acquired through the anatomy course. Each semester either a theme or kaleidoscope of topics is selected in an attempt to expand the anatomical horizons of the participants. These topics are outlined, scheduled, and announced at the beginning of the semester to facilitate preparation by each participant.

The colloquium has many purposes, of which the following litany may provide you with a little more insight.

1. To create a staff of good teachers. I believe that the best teachers are those who have a strong knowledge base of their subject. Only then can you answer questions more completely, explore different ways to clear up problems, and gain a greater comfort in your ability to teach a subject. Colloquium attempts to meet this need.

2. To create an advanced anatomy learning environment. Colloquium provides a multifaceted learning environment. Not only can one learn by attending and taking notes at these lectures, but the opportunity is available for participants to be the lecturer. This can be an exceptional learning experience. There is nothing like taking a new topic, exploring and researching it thoroughly, and then formulating an organized presentation where you verbalize the knowledge you have gained.

3. To create a forum for anatomy discussion. The term colloquium was selected for this course with the intention that it not only involve lecture but discussion. Participants are encouraged to ask questions and participate freely in the colloquium. This can be more effectively realized if people will come prepared to colloquium by previewing
the topic each week. Formulate questions you have and come prepared to ask them during the proceedings.

4. To create anatomists who are critical thinkers. This can be accomplished in two ways. One, the lecturer naturally gets the opportunity to think critically about the topic. It is difficult to design and organize a good lecture without considerable critical thought. Additionally, each participant, with a little preparation and forethought can come prepared with critical ideas or questions about the subject. Also, during the presentation the participants can critically analyze the content and design of the presentation and formulate questions to discuss after.

5. To create quality anatomists. Colloquium attempts to create an environment that allows a group of outstanding students to further their studies of anatomy in preparation for their careers in the health sciences. One of the powerful tools that should adorn every health care providers tool box is a strong knowledge of the machine they deal with on a daily basis — the human body. The attentive and active participant in colloquium will be exposed to lots of knowledge that will be beneficial down the road.

6. To create an opportunity to learn about teaching and communicating. During the course of the colloquium series participants will be exposed to a variety of presenters. Each presenter will have a different background and experience level in teaching and communicating. By analyzing the good as well as the bad that occurs during these lectures, we can increase our insight and understanding of what leads to quality teaching. These are things we might even discuss as a group.

7. Because I really like anatomy. One of the real thrills I get from my job is to continue to learn about and explore anatomy. The colloquium allows me to create an arena to facilitate this love affair.

Colloquium takes a mature approach to learning. Your grade is based on attendance and keeping a notebook, with notes and your thoughts on each presentation. The evaluation process is as follows:

Grade of A: Keep a weekly notebook of each lecture. The notebook should include clear and thorough notes from the lecture, accompanied by a brief, intelligent, thoughtful statement that describes the take home message you garnered from the presentation. You must turn in a complete notebook at the end of the semester. If you miss a week, you must get the notes from a student who was in attendance and rewrite them in your own hand, with your own take home statement. Xerox copies will not be accepted. If you are the presenter of one of the lectures, your lecture notes can be placed in the notebook and you do not need to include a take home message statement.

Grade of B: An incomplete notebook.

Grade of C: Submit one page at the end of the semester that lists the topic of each weekly presentation accompanied by a statement of which lectures you attended and which lectures you missed. The only possible way to fail this course is to lie about your attendance.

What you gain from the colloquium experience is completely up to you. If you attend prepared to learn, motivated to get involved, and follow up by reviewing what was presented you will have a rewarding learning experience. Beyond that I can make no promises. You get out of it what you put into it.