Dear Incoming Medical Students,

Congratulations and welcome to Medical School!

As co-course Director of Human Structure and Function and Director of Human Gross Anatomy and Embryology, I want to give you a heads-up on what to expect for the start of the anatomy course.

I speak for the faculty when I express our enthusiasm to help you build a strong foundation in anatomy and Embryology in order for you to be the best physician that you can be!

Anatomy and Embryology will begin this year with orientation on Tuesday, Aug 11th from 8:00 to 11:00 am (more on this in a moment). The first laboratory (dissection) will be Wednesday, Aug 12th at 8:00 am. The course finishes during final exam week (Dec 14th through 18th 2015).

Anatomy meets two mornings per week for 19 weeks. These meetings will be laboratory dissection. You will be expected to prepare for lab in your Independent Learning Time (ILT). The textbook, course website, and pre-recorded lectures will be critical in this capacity. There will be many additional review sessions (lecture and lab) during the course. The course obviously provides the opportunity to learn every structure in the human body. In addition, it includes coverage of radiographic anatomy. There will also be a number of medical procedures in lab in order to appreciate the application of anatomy to a procedure without a negative consequence. One goal of the course is to prepare you to perform the physical exam in Essentials of Clinical Medicine (ECM). I am confident that you will find your courses interesting, challenging, and clinically relevant.

The Embryology course will consist of 13 lectures given throughout the semester. After an introduction to development, the lectures follow the completion of the dissection of a region. Each lecture will be followed by an on-line quiz to be completed within one-week of the lecture. The goal of the embryology course is to build a solid foundation of Embryology, prepare you to apply embryo during your clinical rotations, study for board exams, and explain some difficult definitive (adult) morphology.

The HSF orientation on Tuesday, August 11th will be an introduction to the course and laboratory procedures and regulations. This part of the orientation is also your opportunity to have your questions about Histology, Gross Anatomy, and Embryology answered. The course syllabus, grading, textbooks requirements, etc will be covered. There will also be an address from the Anatomy Bequest Program on the donor procurement process, as well as, your professional obligations of working with cadavers.

We have much to learn, so we will start dissecting on Wednesday morning, August 12th. You will pick-up your locker assignment and meet your three body buddies after orientation on the 11th. Before your first dissection, please plan to arrive early to 5th floor Jackson Hall - well before 8 am to get changed and ready for the first lab. All labs begin at 8:00 am exactly.
You will need a change of clothes (appropriate for dissection lab) and gloves - see below. Note that University Laboratory policy requires coverage of thighs, legs, and feet. Thus, you will not be allowed in the labs wearing shorts or open-toed shoes. You will be provided with lockers and locks – located on 5th floor of Jackson Hall. You will also be provided with dissection tools. These, dissection notes, Anatomy Atlas, and Dissection guide will be at your dissection table when you arrive for dissection.

You will start your first lab by conducting your first “Physical Exam” on your “first patient”. The patient’s medical history will be provided. You will need to understand the full history, before proceeding to conduct the physical examination. You will then submit your findings (Physical Exam Report - the same form used in ECM) into your dissection notes. After which, there will be the first dissection on the Pectoral region.

During this lab, there will be present a number of second year students to assist you in getting going, and to help you past any ‘first-day jitters’ that you may have.

Please plan to bring the following items with you on Wednesday morning - and for every dissection:

- Old clothes or scrubs, and old shoes to wear in the lab. Much of what you have heard about the fragrance of the dissection lab is true. So bring clothes and shoes that you won’t mind parting-with after the course. You can store these clothes in your locker during the course.
- Gloves. (We are not able to supply gloves). No latex please. We highly recommend nitrile gloves. Nitrile gloves provide the best protection for your hands. Many individuals have strong allergies to latex gloves – anywhere, in any of the labs. For this reason, we strongly suggest these not be used anywhere in lab.

There will be lecture and lab note packets for sale in the University of Minnesota Bookstore in Coffman Union. The lecture notes will serve as a guide to preparation. The lab dissection notes are your guide to the dissection procedure. Additional copies of lab dissection notes will be provided in the labs. All Lecture and lab notes will also be available on the course website.

The following is a list of recommended texts for the course. (bold texts are referenced in our course notes):

2. Essential Clinical Anatomy (K.L. Moore and A. Agur, 2002, 2nd edition, LWW, - This is a concise distillation of the previous text.
3. Grant’s Dissector (This is preferred, but any dissector is recommended. 
   These provide step-by-step instruction to the elaborate, meticulous dissection procedure) 
   i.e. 
   Essential Anatomy Dissector, 2nd ed. J.T. Hansen, LWW
5. Color Atlas of Anatomy. J.W. Rohen, Johannes, C. Yokochi, and E. Lutjen-Drecoll 2007, 6th edition, LWW, - This is considered by many to be the finest photographic atlas available.

This is the **required text** for Embryology. It is a very good text. The lectures in Embryology require supplemental reading from this text. The 12\(^{th}\) edition is unique in that it includes the most recent advances in Embryology research. Lectures in the course will reference this text. It is required because we do not think it likely to pass the course without reading the textbook. Note that the 13\(^{th}\) edition is in print. Either the 12\(^{th}\) or 13\(^{th}\) is fine. The 12\(^{th}\) will be much cheaper to buy.

There are many other good Anatomy textbooks.

For example, *Grey’s Anatomy for Students* (R.L. Drake, W. Vogl and A.W.M. Mitchell) is an easy to read text which also provides a detailed discussion of regional anatomy, an overview of anatomical systems and tissue types, important functional information, and relevant clinical correlations and example clinical cases. Systemic anatomical texts such as *Gray’s* or more detailed regional texts such as Hollinshead’s textbook, are classical reference works that can be helpful when difficult questions arise. If you have a good anatomy text book already (graduate level), you probably don’t need another one. But all students should have an anatomy text for reference.

An anatomical atlas is absolutely required for the study of anatomy and each student should have one. Most students seem to prefer *Netter’s Atlas of Human Anatomy* (F.H. Netter).

However, there are a number of excellent atlases available including *Grant’s Atlas of Anatomy* (A.M.R. Agur) and *Anatomy* (C.D. Clemente). The photographic atlases (e.g. *Color Atlas of Anatomy* by Rohen, Yokochi, Lutjen-Drecoll) show excellent photographs of dissections and are useful to most students.

These are the recommended books. However, the same information can be obtained in most any medical school level text book and atlas. **It is urged that you find-out early the resources that work for you. Do not over-resource yourself. **This is a common problem !!!**

The biomedical library has many, many of the above textbooks as e-books as a resource for you. Use the link to “e-books”. The links are on the HSF blackbag site under “Resources: Embryology & Gross Anatomy”. Or

https://www.clinicalkey.com/dura/browse/bookChapter/3-s2.0-C20100686068

https://www.clinicalkey.com/%21/BrowseCtrl/doBrowseTo/book/%7B%22onlyEntitled%22:true,%22firstChar%22:%22N%22%7D

https://www.clinicalkey.com/%21/BrowseCtrl/doBrowseTo/book/%7B%22onlyEntitled%22:true,%22facet%22:[%22subjmain%253A%2522Medical%2520Education%2522%22],%22query%22:%22%22embryology%22%7D

Most all information regarding the course, including a daily schedule, can be found on the Human Structure and Function Course Web site (in “Black Bag”)

**Please prepare** for the start of the course by completing the following things !!!

All of these are found on the Human Structure and Function (HSF, InMd 6801) web-site (Black Bag):(Go to HSF page, and “Course Home”. Scroll down to “Syllabus”)

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(1) Before orientation on Tuesday, August 11th, please read the course syllabus found on the course website to learn more about the course.

✓ It might also be a good idea to flip through your Netter Atlas to get comfortable with the organization. Note that Gross Anatomy and the Atlas are organized by Regions.

✓ For this reason, it might also be a good idea to read through the various SYSTEMS in your textbook, the sections on: Skeletal, Muscular, Nervous, and Cardiovascular systems to get a overview of the way the systems are organized in each Region of the body.

(2) Before physical exam on Wednesday August 12th
(Go to HSF page, and “Course Home”. Scroll down to “Orientation Videos: Gross Anatomy”)

✓ You will meet your first patient (your cadaver) and dissect on Wednesday, August 12th. In order to take part in this activity, you must first view the video by the Bequest Program on the donation process and respect for the donors……“Orientation to Cadaver Use and Care”

✓ Be sure to view “Intro to Physical exam” on the website.
  i. Also, look over the Physical exam form (“Lab 0”). After the exam of your first patient, you must complete the exam form, in great detail, and email it to me. HSF Blackbag site “Resources: Embryology & Gross Anatomy” and “Gross Anatomy Lab Notes”

(3) Before your first dissection, please view the following videos.
  These will serve as very valuable preparation!

✓ Your dissections in Gross Anatomy are done by Regions. It might be a good idea to watch the “Lecture to introduce the Anatomy by Systems – put the pieces together”

✓ You may be interested in watching the video on the “History of Anatomical Dissection”

(4) To get a valuable introduction/ learn how to DISSECTION
  You SHOULD DEFINITELY watch the videos on dissection. This WILL NOT be covered in lab before dissection.

✓ “Orientation to Dissection – Instruments and Techniques”
✓ “Introduction to Dissection Techniques”

✓ There is also an introduction video on “Anatomical Terms and Conventions”. Last year’s students suggest that this is required viewing.

(5) To monitor preparedness, and prevent anyone from falling behind, students must complete and submit for each lab session a “pre-lab assignment” at the start of each lab session. The assignment will not be worth points, but required in order to be allowed to dissect and learn. This can be found on the course website. Please have this done for your first dissection (Pectoral Region) on Wednesday.
(6) Upon completion of every laboratory dissection, an evaluation or “check-out” form must be completed. These will be provided to you at the end of each lab session. Your dissection must be thoroughly completed, all questions and discussion in the lab notes completed, and parts of the check-out form must be addressed. The checkout form must be approved and signed by a faculty member or TA before embarking on the subsequent dissection. Note that the check-out form does not need to be approved and signed before leaving the lab. However, this MUST be done before you will be allowed to begin the subsequent dissection.

That’s about it. We hope you have an excellent experience in your Gross Anatomy studies!

See you in August.

Anthony J. Weinhaus, Ph.D.
Director, Program in Human Anatomy
Assistant Professor,
Department of Integrative Biology & Physiology