THE UNIVERSITY OF CHICAGO
BIOLOGICAL SCIENCES

Department of Organismal Biology & Anatomy
1027 E. 57th Street, Chicago, IL 60637

June 22, 2021

Dear 2021 Entering Class,

I am Dr. Callum Ross, Course Director of *The Human Body*, the human gross and microscopic anatomy and embryology course at the University of Chicago. I welcome you to the Pritzker School of Medicine. I am looking forward to working with you all! During this course you will learn a large new anatomical vocabulary, learn to identify a large number of structures in a cadaver, and learn to visualize the three-dimensional relationships of those structures to one another. Please refer to the Human Body 2021 course schedule as you plan your lives for August through October.

Most of you are looking ahead to the upcoming course with a mixture of great anticipation and at least some trepidation. Beyond the obvious issues around the dissection of a human body, you should know that the experience of cadaver dissection will profoundly change how you view yourself and others. It is an essential first step in your education as a clinician, but it is also an experience that will set you apart from most other people.

Know that your instructors are keenly aware of some of the intense emotions you may experience when you initially work with your cadaver, but try to keep in mind that those difficult emotions will pass. The temporary discomfort you may experience is well worth it, as a good working knowledge of anatomy is essential to be effective in most areas of medicine. If you are worried about your initial reaction to working in the cadaver lab, you may contact me (**rossc@uchicago.edu**) or the Laboratory Manager, Dr. Georgina Voegele (**georgina@uchicago.edu**) to arrange for a tour before the cadaver laboratories start.

Teaching Staff

I will be joined in the laboratory and lecture hall by our outstanding teaching staff: Drs. Georgina Voegele, Kara Feilich, and J.D. Laurence-Chasen. These individuals are exceptional anatomists, as well as dedicated and popular teachers. I look forward to working with them.

In addition to your laboratory instructors, you will benefit greatly from the attention of our student Peer Educators (PEs) and Teaching Assistants (TAs). They are mainly second and fourth year medical students, but can also include MD/PhD students and graduate students. Some of them have served as PEs or TAs in the past. They are carefully selected and play a critical role in the course. They will actively assist you in your dissections, conduct regular small group sessions on medical imaging, conduct review sessions, and help you to organize practice practical exams. They work incredibly hard for you and deserve your utmost respect and gratitude.

Throughout the course, we will be visited in lab by clinicians from the hospital. They will provide a short clinical lecture at the beginning of lab and then will tour the lab and visit with you while you are dissecting. They are often accompanied by residents. These visits give you additional clinical context for the anatomy you are learning, and give you the chance to meet potential future mentors and to make contacts with people you might like to shadow.

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Laboratories

The laboratory portion of the Human Body course is very technical. The goal is for you to learn anatomy so that you can understand and converse readily with your future clinical instructors. The course is not an intellectual exercise and the material covered is carefully chosen to provide the level of detail you need to progress efficiently in subsequent clinical courses and exams. Of course, you may ultimately choose a specialty that requires knowledge of only a subset of the material we will cover – but at this point, many of you are intellectual stem cells, and your fate is undetermined. What you learn in this course will allow you to pursue any professional path, and perhaps more importantly, help you make informed decisions about your professional future.

The material covered in lectures will be revisited in the laboratory portion of the course. The laboratory portion of the course is very structured and very dense. For several reasons, **Attendance in Lab is Required**. You are unlikely to pass the course if you do not attend. The scheduled laboratories are the times when instructors and clinicians will be there. Moreover, during the eleven weeks of the course, you must work with three other members of your lab team to dissect. This is an enormous amount of work and it is unreasonable, unfair, and unprofessional for you to expect the other members of your team to do this work for you. So, be prepared, show up on time, and do your fair share of the work. Plan your life accordingly. Please note that you should expect to work outside of regular lab times in order to keep up with the material. Indeed, you may find that you learn some things better in a small group, with a partner, or alone in lab. You will have 24/7 access to the lab.

Dissection tools, an online dissection manual, an online atlas, and iPads will be provided for each dissection team. Hard copy reference material will also be available. iPads, tools and hard copy materials should never leave the lab. We do require that you buy a copy of an atlas of your choice to prepare for lab and study for exams. Some recommendations are given below. You will need to have a set of dedicated clothing—including shoes—for working in the dissection lab. The chemicals used to preserve the cadavers are safe but odiferous, and you will not want to take those odors home with you. Locker rooms are provided for you to change in and out of your street clothing. We also have a generous supply of clean pre-owned scrubs that are available on a first-come, first-serve basis, and should meet your needs. We usually have enough for everyone. If you are pregnant, breast-feeding, or planning on becoming pregnant, please contact me or Dr. Voegele to discuss the safety of the preservatives and strategies for reducing exposure.

Medical Imaging and Histology

In addition to learning vocabulary and learning to identify structures on a dissected cadaver, you need to be able to visualize these structures in place in three dimensions and at various scales. This is achieved through the study of radiographs and serial cross sections of MRI and CT scans taken from living patients. You are required to purchase access to eAnatomy, an online medical imaging atlas as part of this course. Details are given below. You will also learn histology using virtual microscopy of slide collections. Medical imaging and tissue histology is studied in the laboratory and online.

Exams

Each written lecture exam is accompanied by a laboratory practical exam, graded separately. In the written exams you will be examined on written material, histological material, and on medical images. The practical exams in the dissection laboratories will be on cadavers, histology, and medical images. In all written and practical exams, you must earn a grade of 65% in order to pass. You will have one chance to retake each exam if you fail on your first attempt. Not showing up for an exam (for ***any*** reason) will use up one of your attempts. Please schedule your time so that you are available for the course between August 10th and October 22nd. A compulsory lab clean-up day will be scheduled at a later date.

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Computers

You will need access to a personal computer to complete the course. A laptop is recommended. All of the lectures will be available to you online, all of the textbooks are available online, the embryology and histology material is only available online, as are the laboratory instructions. You can certainly bring a laptop to lecture to take notes on the PowerPoint presentations, which will be available to you before class. We recommend that your laptop be either a PC running Windows 10 or higher, or a Mac running Mac OS version 10.8 or higher. The laptop should also have a 13" or larger screen and support a resolution of at least 1024 x 768. Please note that many of our digital resources cannot be accessed with Chromebooks, Linux, or mobile (Android, iOS) devices.

Study Tips

Learning anatomy involves a great deal of memorization. The sooner you start to study the vocabulary, the better. So, if you want a leg up, get a set of flashcards and spend some quality time with them over the rest of the summer. You may wish to brush up on material that I assume you know, such as basics of cell structure. The embryology text we use is online (embryology.ch) and you can access it at any time. The medical imaging site we will use is eAnatomy. An effective strategy, and an efficient use of your time, is to use the text and flashcards to become familiar with the names of the structures you will be looking for in your dissection BEFORE each lab. This allows you to focus on doing a good dissection and correctly identifying the various structures you need to know on the cadaver while in lab. It also allows you to utilize your instructors for learning the most challenging material rather than basic things you can learn on your own.

Finally, this is a good time to assess your learning techniques. It's never too late to learn better. To this end, I recommend *How We Learn. The Surprising Truth About When, Where, and Why it Happens*. Benedict Carey, Random House, 2015.

I am looking forward to meeting all of you. Please feel free to e-mail me or Dr. Voegele (**georgina@uchicago.edu**) if you have any questions.

Sincerely,

Callum F. Ross, Ph.D.
Professor of Organismal Biology & Anatomy
rossc@uchicago.edu