

# Educational Software in the Library



All of this software is available on the public computers in the LRC and the Reference Room. Links are provided for titles that are also available from off campus (you will need to be signed in into the Galter Library website for off campus access). Click on the links provided to access resources directly. Any title not linked is *only* available on a library computer.

## **Auscultation of Breath Sounds**

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This software offers real-time video of an actual patient exam with diagrams that highlight proper procedures for auscultating breath sounds. The audio sections allow you to hear a variety of normal and adventitious breath sounds, and provide detailed explanations about each type. You can also learn principles of chest examination, bilateral chest exam, identification of lung lobes, and identification of breath sounds. The program also includes a self-assessment examination, with answers and detailed feedback for each response.

## **Bates' Visual Guide to Physical Examination**

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The fourth edition of Bates' Visual Guide to Physical Examination has been completely revised to include current equipment, the latest techniques, and modern settings. Each Module shows step-by-step examinations with rationales for the clinician's actions and contains expanded discussions of health history taking, interviewing, and describing findings. Graphics throughout the series illustrate key components of anatomy and physiology. Patients and actual expert clinicians represent diverse age groups and cultures to reflect realistic practice settings.

[Access Bates' Visual Guide to Physical Examination now.](#)

## **Brainstorm**

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BrainStorm is an interactive program created to help you learn and review human neuroanatomy. There are four presentations of neuroanatomical structures:

- Cross-Sections (both myelin-stained sections and magnetic resonance images) allow you to locate structures in slices in several different planes
- Gross Dissection Images show color photographs of dissected specimens of the brain and spinal cord
- Diagrams illustrate specific structural and functional relationships
- Information Screens provide notes and background for the structures seen in the previous three sections

All four modes are cross-referenced, allowing you to quickly and easily examine all aspects of a particular region or structure.

## **Cardiac Arrest**

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Cardiac Arrest is an ACLS simulator with 45 patients, covering a wide variety of medical problems associated with cardiovascular collapse. Many patients pose difficult therapeutic priorities, presenting problems beyond heart attacks, such as hypocalcemia, hypothermia, and hyperkalemia. It casts you in the role of emergency physician. The patient's history is presented, and the resuscitation efforts begin. You read the ECG on the computer screen, interpret the vital signs and laboratory data, and give treatment orders. As you resuscitate the patient, you type treatment orders in plain English, ordering virtually anything you want any way you want. You can also use the quick-access buttons for common interventions, or click on a drug or action in the information listings. There are online protocol flowcharts, discussions of drug indications and doses, and teaching text for every patient.

## **Clinical Human Embryology Online**

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This is a web-based program that follows the development of the human embryo from a single-cell fertilized egg to birth. You can learn about development in three different ways: cases, subjects and by viewing the timeline. A case-based approach allows you to view topics such as spina bifida and Goldenhar Syndrome. Subject-based access allows you to see topic such as head and neck development and development of the eye. The timeline approach allows you to see everything that is happening during a particular week of development.

You can access this resource from on or off campus. Go to the Galter homepage, search for this title under "Find Resources."

[Access Clinical Human Embryology now.](#)

## **Color Atlas of Histology**

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This program is based on the book, *Color Atlas of Histology*, 3rd Edition. It contains descriptive text for all the slides. You can view histology slides with and without labels, zoom in and out to see more detail, and open multiple slides for comparison.

## **Digital Analytic Histology**

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This is Dr. Telser's website where the interface is organized in the same manner as a histology textbook: namely, into chapters that reflect the way histology has been conceptualized for the past century. Each image is annotated with transparent overlays that illustrate important, basic histological features.

[Access Digital Analytic Histology now.](#)

## **Dissection Videos**

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This website contains the dissection videos in the Cine Prosector series. It also contains other dissection videos arranged by topic: Abdominal Region, Arm and Hand, Axillary Region, Back, Head and Neck, Leg and Foot, Pelvis and Perineum, and Thorax and Mediastinum. Also available in this resource are histology videos on various topics.

All the above videos are also available on the web on or off campus. Go to the Galter homepage, search for "Dissection Videos" under "Find Resources."

[Access Dissection Videos now.](#)

## **ECG Tutor**

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This tutorial describes how and why the ECG changes under a variety of physiologic, pathologic, and pharmacologic conditions. Extensive use of animated graphics allows you to visualize the exact electrophysiologic changes in the heart which cause the changes recorded on the body surface. ECG Tutor contains easy-to-read information that stresses anatomy and physiology rather than pattern recognition, emphasizes correlation of ECGs to clinical settings, and incorporates numerous practical clinical examples.

## **Eroshenko's Histology**

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You can view slides in the Study Mode, where you can learn about them, or in the Review Mode, where you can quiz yourself. The slides are searchable in 2 ways: by tissue type and by organ system. You can read descriptive text about the slides and view them with or without labels. There is also a searchable glossary. To access this, you'll need a code number that is available at the LRC or Reference Desk.

## **Fundamentals of Human Embryology (Mac Baby)**

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This animated program stresses principles not terminology and provides access to 18 animated sequences, which

can be studied in any order. The user reviews important three-dimensional changes that transform a fertilized ovum into a human embryo. Major topics include formation of germ layers; neural tube; tube-within-a-tube body form; intraembryonic coelom and mesenteries; digestive system; pharynx; cardiovascular system; nervous system; sensory systems; urogenital system; and face.

## **Goniometry**

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This program explains the principles of goniometry and demonstrates all techniques of joint measurement. It has a self-assessment quiz which provides immediate feedback and a terminology section that defines all relevant terms.

## **Haines' Interactive Neuroanatomy**

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This program contains all 605 images from the Sixth Edition of Dr. Haines' neuroanatomy atlas, plus labels that can be turned on or off, multiple-choice testing, and Stedman's definitions of clinical terms. Images of internal spinal cord and brainstem morphology and of functional components, tracts, pathways, and systems can be rotated from anatomical to clinical orientations, enabling students to see exactly how the brain and its functional systems are viewed in the clinical setting. All images are presented in both PDF format for printing and JPEG format for downloading to PowerPoint.

## **Heart Sounds and Murmurs**

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This program integrates visual images of normal and diseased hearts and the synchronized actual heart sounds themselves. It contains 135 clinical and diagnostic tutorials, 200 actual heart sounds integrated with graphic images, and more than 100 cineangiographic, echo-doppler, and hemodynamic motion picture sequences. It also contains chest x-rays, arterial and venous pulses, pathology slides, morphs from healthy to diseased hearts, and embryology of congenital lesions.

## **Histology: An Interactive Virtual Microscope**

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This 2 CD set allows you to view slides by system. You can see the slides with or without labels, magnify parts of them, and read descriptive text.

## **Iliad**

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Iliad is physician diagnostic and treatment software that provides expert diagnostic consultations and patient simulations. It covers more than 930 diseases and 1500 syndromes and provides treatment protocols for each including the ICD-9 codes for each diagnosis. There are 13,900 disease manifestations. You can use the Consultation mode where you enter history, physical and lab findings and get differential diagnosis suggestions, or you can use the Simulation mode where you can generate a simulated patient case and practice your problem-solving skills.

## **Interactive Brain Atlas**

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This software contains 2-D and 3-D views of the brain from cadaver sections, MRI scans, and computer reconstructions. It is a good program to use when you want to see what a structure looks like and where it is in the brain. There isn't a lot of explanatory material, but there are Quick-time movies of reconstructions which provide a very effective way to visualize complex spatial relationships.

[Access Interactive Brain Atlas now.](#)

## **Interactive Functional Anatomy**

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This website contains a 3D model of the entire skeleton with muscles, ligaments, bones, arteries and nerves. For each section there is explanatory text, a quiz module, animations and videos. It includes titles such as: Interactive Shoulder, Interactive Thorax & Abdomen, Interactive Pelvis & Perineum, Interactive Knee, Interactive Head & Neck, Interactive Hand, Interactive Spine, Interactive Hip and Interactive Knee.

This is a web-based program you can access from on or off campus. Go to the Galter homepage, search for this title under "Find Resources"

[Access Interactive Functional Anatomy now.](#)

## **Netter's Interactive Atlas of Human Anatomy**

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The 500-plus plates of anatomical paintings by Dr. Frank Netter are compiled in online form. Illustrations can be accessed by plate number, body region, organ system, or keyword. Features include selective label removal, quizzing by name or structure identification, options to create lists organized by structure, organ, or system.

## **Netter Presenter - Human Anatomy Collection**

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Contains images by Frank H. Netter, MD, the world-renowned medical illustrator, and associated artists, from *Netter's Atlas of Human Anatomy*.

Import images into your PowerPoint or other presentation software and customize them to your needs -- with or without labels and leader lines. Enhance lectures and presentations on human anatomy with these beautifully rendered, full-color images.

## **Netter Presenter - Human Embryology Collection**

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Contains images by Frank H. Netter, MD, the world-renowned medical illustrator, and associated artists, from *Netter's Atlas of Human Embryology*.

Import images into your PowerPoint or other presentation software and customize them to your needs -- with or without labels and leader lines. Enhance lectures and presentations on human anatomy with these beautifully rendered, full-color images.

## **Netter Presenter - Human Neuroscience Collection**

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Contains images by Frank H. Netter, MD, the world-renowned medical illustrator, and associated artists, from *Netter's Atlas of Human Neuroscience*.

Import images into your PowerPoint or other presentation software and customize them to your needs -- with or without labels and leader lines. Enhance lectures and presentations on human anatomy with these beautifully rendered, full-color images.

## **Netter Presenter - Human Physiology Collection**

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Contains images by Frank H. Netter, MD, the world-renowned medical illustrator, and associated artists, from *Netter's Atlas of Human Physiology*.

Import images into your PowerPoint or other presentation software and customize them to your needs -- with or without labels and leader lines. Enhance lectures and presentations on human anatomy with these beautifully rendered, full-color images.

## **Neuroanatomy Lab Assistant**

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This software reviews the structural components of neuroanatomy with microscopic, radiologic and gross specimens. It includes a Lab Guide, Exams, Case Studies, and the Neurologic Exam. The Atlas section contains MRIs, CT Scans, and Angiograms.

## **Normal Walking**

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This program introduces the mechanisms of normal walking and gait analysis to those who treat patients with disabilities. It has a variety of levels of interaction - you can watch a video uninterrupted or one section at a time. The

tests also come in varying levels of difficulty: easy, medium or difficult.

## **Observational Gait Analysis**

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This program teaches the users observational skills necessary to identify subtle gait deviation in individuals with various problems. You can observe real patients with gait problems in real time or slow motion to determine how to identify those types of problems.

## **Running and Sprinting**

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This program introduces the mechanisms of running and sprinting to provide insight for maximizing athletic performance and avoiding injuries. It has a variety of levels of interaction - you can watch a video uninterrupted or one section at a time. The tests also come in varying levels of difficulty: easy, medium or difficult.

## **SimBioSys**

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SimBioSys Physiology Labs is a tool for learning physiology. At its heart is a real-time simulation of the human body. This simulation uses mathematical models to answer "what if" questions about the function of the heart, lungs, and their autonomic control. It has an interactive on-screen textbook, with animations, quizzes, and illustrations. This curriculum is supplemented with 68 guided laboratory exercises, which use the simulator to teach basic concepts.

## **Sobotta Atlas of Human Anatomy**

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Presents all illustrations from the 13th English edition of the Sobotta Atlas. Over 1500 illustrations- detailed drawings made from dissections, cross-sections, classical relational anatomy, and reproductions of modern imaging technique - cover the entire macroscopic anatomy of the human body and enable direct reference to clinical practice. Included are more than 130 new drawings from original dissections. The valid new Terminologia Anatomica was adopted entirely.

## **Structure-Function Radiologic Anatomy**

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Dr. Cochard's website is a formal part of the course and it identifies the structures on X-rays that you are expected to learn. Study the program on your own (or in a group), and relate the features you see in the X-rays to the structures you study in the lab. X-rays will be on the practical exams, with labeled features selected from those that appear here.

[Access Structure-Function Radiologic Anatomy now.](#)

## **Sylvius, Fundamentals of Human Neural Structure**

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This program features colorized brains, functional information on labeled structures, audio pronunciation of neuroanatomical terms, and a self-quiz mode. It is comprised of Surface Anatomy, Sectional Anatomy, Brainstem Model, and Index modules, and includes a Pathways module focusing on the major neural connections, an Animations module comprised of QuickTime and QuickTime VR movies, and an enhanced Spinal Cord & Brainstem module featuring cross-sectional anatomy.

## **USMLE Tutorial and Practice Test**

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Sample test materials for the USMLE, Step 1, Step 2, and Step 3, updated annually.

## **Wheater's Functional Histology**

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This is based on the book of the same name, and is most useful when used in conjunction with the book. You can view slides to identify structures, but there are no labels and no way to quiz yourself and check your answers.

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