

Student focus group comments about GATEways initiatives:

- In lab would be great, especially if large view screen available.
- The video shows how to dissect and what to look for.
- Idea is great. It connects pieces.
- Access from home and before and after lab would help.
- The animation gives a better view and idea of how things work and look.
- Awesome!
- This would be really good for learning injections.
- How about creating virtual surgery?
- As long as it's a supplement don't do away with lab and professors – need to touch and feel for profession.

IV. SkyEye® Camera Prosection Videos

This initiative is directed by Dr. Omid Rahimi as the primary faculty member. The Sky-Eye[®] camera is a specially designed camera on a boom arm that can rotate and approach the dissection from unique vantage points. Video captured using the Sky-Eye[®] can be fed to monitors in labs or classrooms, synchronously, or recorded to digital media for asynchronous use in teaching or continuing education.





The GATEways Team:

- Mr. David Baker, Medical Illustration Supervisor Educational Media Resources • Academic Technology Services
- **Dr. Patricia Brewer**, *Assistant Dean for Student Affairs* School of Allied Health Sciences and Associate Professor, Department of Physical Therapy
- Dr. Vicki Byers, Associate Professor/Clinical
 Department of Acute Nursing Care School of Nursing
- Mr. Sam Newman, 3D Animator Educational Media Resources • Academic Technology Services
- Dr. Nancy Girard, Associate Professor and Chair Department of Acute Nursing Care • School of Nursing
- Dr. Mary Heye, Associate Professor Department of Acute Nursing Care • School of Nursing
- **Dr. Linda Johnson**, *Professor* Department of Cellular and Structural Biology Graduate School of Biomedical Sciences
- Dr. John Littlefield, Director Academic Center for Excellence in Teaching
- Mr. Chris McKee, Medical Illustrator Educational Media Resources • Academic Technology Services
- **Dr. Ron Philo**, *Senior Lecturer* Department of Cellular and Structural Biology Graduate School of Biomedical Sciences
- **Dr. Omid Rahimi**, *Assistant Professor* Department of Cellular and Structural Biology Graduate School of Biomedical Sciences
- Ms. Janis Rice, Assistant Professor/Clinical Department of Acute Nursing Care School of Nursing
- Dr. Debra Stark, Evaluation Specialist Academic Informatics Services
- Mr. Will Underwood, Producer II EMR Video Production • Academic Technology Services
- **Dr. Frank Weaker**, *Associate Professor* Department of Cellular and Structural Biology Graduate School of Biomedical Sciences
- Dr. Vick Williams, Professor
 Department of Cellular and Structural Biology
 Graduate School of Biomedical Sciences
 Brochure design by Ms. Luisa Horton, Printing Services, EMR

































Introduction:

The **GATE**ways (Gross Anatomy Teaching Enhancement) project began in February 2005 as an interdisciplinary collaboration among faculty and staff of all five schools at the UT Health Science Center at San Antonio. The goal of GATEways is to design, develop, implement and evaluate four technological initiatives to be used in teaching human gross anatomy throughout the Health Science Center. The five schools at the Health Science Center (Medicine, Dentistry, Allied Health, Nursing, and the Graduate School) have over 800 students who are enrolled in or need access to anatomy content each academic year.

The **GATE**ways project was honored to receive the First Place Award in Innovations in Health Science Education in October, 2006 given by the University of Texas System. Information on the GATEways project can be found at our website:

www.uthscsa.edu/vs/gateways.html.





The members of the GATEways team would like to thank those who have graciously funded our project:

- A. UT Health Science Center Office of the President. Dr. Francisco G. Cigarroa
- B. SBC/AT&T Foundation, Ms. Laura Sanford
- C. UT Health Science Center Office of the Vice President and Chief Information Officer. Mr. A. Jerome York
- The University of Texas System, Office of the Executive Vice Chancellor for Health Affairs. Dr. Kenneth I. Shine

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GATEways Initiatives:

I. A series of digitally videotaped human cadaver dissections with still photographs

This initiative is directed by Dr. Vick Williams as the primary faculty member, with assistance from Drs. Omid Rahimi and Patricia Brewer. Video production assistance is from Will Underwood, EMR Video Production Services. At this time twenty-five videos are nearing completion, covering the thorax, abdomen and head and neck regions. The majority of these videos have been recorded in High Definition video, accompanied by a scripted audio narration, and have been edited and labeled in post-production. These videos are available to the faculty and students of the Health Science Center on the university server, linked to courses in Blackboard®, and available as podcasts. Future dissection goals include back and extremities.

II. An instructional module of three dimensional animations of the head, to include the skull and cranial nerves

This project is directed by Dr. Frank Weaker as the primary faculty member, with medical illustration assistance from David Baker, Chris McKee and Sam Newman. This initiative has two parts; twelve cranial nerve modules and an interactive skull module. The cranial nerves are being modeled in 3D Studio Max[®] and placed into Flash[®] to add interactivity with the goal to have all twelve modules completed by the end of 2007. These modules are currently being evaluated by students and faculty. These modules are available to Health Science Center faculty and students on the university server, and can be linked to courses in Blackboard[®]. Future plans include addition of blood vessels to these animations.

The interactive skull module is being developed using the commercially available three dimensional ViewPoint[®] skull. Available Flash[®] versions of the modules have been introduced into some courses and evaluated for guality, as early as the beginning of academic year 2006-2007.

www.uthscsa.edu/vs/gateways.html



III. Implementation of an anatomical testbank. to include illustrations. photographs and radiographs.

This initiative is directed by Dr. Patricia Brewer as the primary faculty member, with assistance from Drs. Omid Rahimi, Linda Johnson and Mary Heye. A testbank already in use in the medical gross anatomy course is being adapted to include questions using the original Health Science Center radiograph collection (300+ films). These films have been digitized, labeled using Photoshop® and all patient data removed from the images in order to comply with HIPAA regulations. Illustrations will also be drawn from still photographs from the dissection videos and the animations. This testbank will be available to faculty and students on the university server, on CD/DVD, incorporated into courses on Blackboard®, or in the classroom using the Turning Point Audience Response System[®].



More Information

If you are interested in:

- 1) Receiving a DVD copy of the GATEways presentation made at AAMC, or
- 2) Being a collaborator with us on the development of gross anatomy teaching materials

Please fill out the information below and either drop it in our box at Booth 2504 or fax it to:

Dr. Patricia Brewer

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Email:	

Please send me a DVD.

I am interested in collaborating on the development and use of gross anatomy teaching materials.