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Greetings From Your President ................................................................. 3
   Joe Griswold

Taking HAPS to the Next Level: Introducing the New HAPS-Institute (HAPS-I) .................... 4
   Kevin Patton

ELECTING THE LEADERSHIP: DESCRIPTIONS OF THE OFFICES TO BE FILLED IN THE 2007 ELECTION .................. 6
   Margaret Weck

MEET THE CANDIDATES ........................................................................... 7

EDUCATIONAL ISSUES
   “The Portal”: A Pilot Online A&P Community Learning Website ................................................. 10
   W. David Currie, Karen K. King, Norma J. MacRae, John G. Osborne

TEACHING TIPS
   Meat Is Muscle .......................................................................................... 13
   Mark Eberle

MAKING YOUR PLANS NOW TO SURF ON OVER TO SAN DIEGO FOR HAPS 2007 ..................... 14
   Valerie O’Laughlin Honored for Excellence in Teaching, Research, Scholarship ......................... 15

NORTHWEST REGIONAL HAPS CONFERENCE REPORT ......................................................... 16

HAPS COMMITTEE REPORTS
   HAPS Public Relations Officer ............................................................................. 19
      David Evans

   HAPS Grants and Scholarships News ............................................................................. 20
      Amy Way

   What’s New on Safety ......................................................................................... 21
      Rema Suniga

HAPS 2006 IN REVIEW
   Summary of Workshop # 602: Repairing Models ............................................................. 23
      Paul Teller

   Summary of Workshop # 604-704: What Everyone Should Know For Teaching Gastrointestinal Physiology ................................................................. 27
      Barbara E. Goodman

   Summary of Workshop # 412-512: Designing a Student Guide for Meaningful Learning ....... 28
      Harold Modell

   Summary of Workshop # 602: Biology of Aging: On Line With an Attitude! ......................... 29
      Michael Glasgow

   Some of the Coolest Stuff on wwwhapsweb.org ............................................................. 30
      Tom Lehman
HAPS-EDucator is the official publication of the Human Anatomy and Physiology Society (HAPS) and is published four times per year. Major goals of the Human Anatomy and Physiology Society are: to promote communication among teachers of human anatomy and physiology in colleges, universities, and related institutions; to present workshops and conferences, both regional and national, where members can obtain information about the latest developments in the health and science fields; and to encourage educational research and publication by HAPS members. HAPS was established in 1989.

Annual membership dues are $50 for full-time faculty, $35 for retired, part-time faculty, and students. Annual membership renewals shall be due on January 1 or July 1. New members shall renew on whichever date most closely follows the date of their initial membership. HAPS phone: (800) 448-HAPS (4277). Phone: (800) 448-HAPS (4277) for information on membership, meetings, and more! Send correspondence to: HAPS, 8000 Bonhomme, Suite 412, St. Louis, MO 63105. Check out our new webpage at: http://www.hapsweb.org/

SUBMISSIONS TO HAPS-EDucator

Papers for publication, requests for information, positions available and wanted, and letters to the editor are welcomed. Articles may be submitted to the editor as an e-mail attachment as a Microsoft Word or Word Perfect file or on CD-R disks--please include a hard copy as a backup. If references are included, please follow the methods suggested in Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers, 7th Edition, Style Manual Committee (Council of Biology Editors) Cambridge, Cambridge University Press. 2006.

It is the policy of the Human Anatomy and Physiology Society (HAPS) that any advertising appearing in its publication(s) must be related to the teaching of anatomy and physiology. The HAPS-EDucator Editor and HAPS-EDucator Editorial Advisory Panel jointly determine whether an advertisement meets the criteria of HAPS. Any advertisement that is deemed not to meet the needs of the organization will not be printed, and the advertisement plus any monies collected from the advertiser will be returned. The opinions reflected in advertising that appear in this publication do not necessarily represent the opinions of HAPS. Advertisement of a product in the HAPS-EDucator does not represent endorsement of that product by HAPS. Contact the Editor for information on advertising rates, advertisement size and the procedure for submitting an advertisement to HAPS-EDucator for publication.

DEADLINES FOR SUBMITTING MATERIAL TO HAPS-EDucator: August 1 (Fall issue); November 1 (Winter issue); February 1 (Spring issue) ; April 15 (Summer issue).

CONTACT THE HAPS-EDucator Editor: Susan Baxley, HAPS, 8000 Bonhomme, Suite 412, St. Louis, MO 63105. hapsed@hapsweb.org
I write this as many of you begin the spring term of your academic year, and please accept best wishes on behalf of the HAPS Board of Directors for a rewarding and interesting time as you do the important work of helping students learn Human Anatomy and Physiology.

During the period since Christmas, the HAPS leadership has been very busy with activities surrounding the annual Winter Meeting over Martin Luther King weekend. Twenty-six members of the leadership team gathered in New Orleans to work on HAPS business for two and a half days. It was an intense collaborative effort with discussions of critical issues, reports, and long-term planning. I believe that most participants will say it was both productive and enjoyable. We were able to work hard and still sample a bit of the food and ambiance of the French Quarter. Based upon what we saw and heard from local organizer Judi Venuti, the 2008 Annual Conference will feature great activities in a lively place. On a more somber note, it is clear, even in the downtown areas, that New Orleans continues to struggle greatly with the aftermath of Katrina and the lack of resources. Fortunately, we can expect little or no impact from the devastation on our 2008 annual conference. In the following paragraphs, I would like to highlight some major developments that are important for HAPS members.

We are facing a major transition in HAPS over the next 18 months. Our business manager, Tonya Ferguson of Ferguson Management Company, has announced that she will retire no later than July 1, 2008. She has been most gracious in giving extended notice and agreeing to work closely with us to locate another business management organization. Tonya is the first and only business manager in the history of this organization and a person who has “adopted” us in many ways. Most notably, she provides excellent service and frequently goes way beyond her contract in offering guidance and help, especially to members of the Board and committee chairs—for no additional charge. While her work has been a wonderful gift to us over the years, we now face the challenge of finding a successor that we can afford. Tonya has warned us, that to get the same level of service she provides we can expect to pay at least twice as much. The Board is confident that we can make this transition effectively, but we will need to be creative. I am pleased to report that a task force has been identified to push forward with a search immediately and that President-emeritus Mike Glasgow will be leading it.

In New Orleans, President-emeritus Kevin Patton gave a lively and humorous AV presentation on the plans of HAPS Institute (HAPS-I) for San Diego. In my previous column, I reported that one course was being offered during the San Diego annual meeting. That was the plan then, but things have evolved and we now have two courses, one in renal biology and the other in special topics, built around the update seminars. Kevin has written a fine article for this edition of the HAPS-EDucator, so please check for details on page 4. From closely following the developments of HAPS-I, I can tell you that these will be very interesting and useful courses for A&P instructors. I strongly encourage you to consider enrolling in one or both.

A significant portion of our Winter Meeting was taken up with long-term planning activities. Small groups of four or five people worked on a series of issues that I believe are vital to our ability to grow and become more effective at our mission of improving the quality of teaching and learning in Human Anatomy and Physiology. Each group worked on a number of questions related to the major issue it was charged to think about. In reporting sessions that followed, each group presented its ideas to the combined Board and Steering Committee.

As HAPS grows in size and stature, one long-term goal is to increase awareness about the resources and services HAPS offers. For that reason we have appointed David Evans of Pennsylvania College of Technology as our Public Affairs Officer. David has a background in public relations and will work closely with our leadership to bring us timely information about events that may impact HAPS members or provide new opportunities for us. One of our planning groups in New Orleans worked to define the priorities in his job description and suggested specific steps going forward. One suggestion is that the job is too big for one person, so that David needs to have others working as part of a team. If you have an interest in Public Affairs and would be willing to help us in this important new effort, contact David at devans@pct.edu.

The Partner Associations Committee is one that is gaining increasing importance as we take our place among other academic societies and seek useful collaborations. In the past, the group has been chaired by the President-Elect, but that arrangement has proven unwieldy, given the other responsibilities of the office. The Board passed a motion to make this group a free-standing committee with its own chair and members. The members from HAPS are typically individuals who belong to another society with whom we are partners. To date, our partnerships have yielded many benefits to HAPS. For example, at our last several annual meetings, update speakers have been sponsored by the
Greetings - continued from page 3

American Physiological Society (APS) and the American Association of Anatomists (AAA). This past fall, AAA co-sponsored our Eastern Regional Conference in Rochester, NY. As we get the new committee leadership on board, we are looking for people who wish to join this group. If you are active in another society (NABT, NSTA, etc.) please consider working with our Partner Associations Committee. Margaret Weck is the contact person (mweck@stlcop.edu).

A third group of long term planners worked on the area of communication and publications under the leadership of Mark Bolke. HAPS already has an impressive list of publications ranging from the HAPS-EDucator to standardized test to position statements on critical issues. Many of these are now available to members at www.hapsweb.org. However, as HAPS grows there are increasing needs for broader coverage and new columns in the HAPS-EDucator, new demands on the Testing Committee, and better coordination of written and web publication. As we work to represent ourselves more effectively through both paper and web publications, we need additional people with some writing skills and a passion for getting out the word about what great things are going on in HAPS. Look for a great new column from our Public Affairs Officer in future issues of the HAPS-EDucator and newsflashes on HAP-L.

Our website www.hapsweb.org has become a major tool for communication within the Society resulting, in part, from the unceasing efforts of President Carl Shuster. As Board president, I can report that our monthly e-meetings have become very easy to manage with the Forum feature we use to gather and organize posts for our discussions. And literally every committee can use web features to publicize its activities, make documents available, increase membership, and raise money. We have been working on a new plan to link up with commercial partners who would provide members special entrée to their products while generating income for HAPS. Likewise, we increasingly use archiving services of our web provider to organize and make available the large number of important documents we generate each year. As we implement our long term plans, web services will be a factor we consider at each step. What do we need and how do we pay for it?

A fifth group of planners focused on the HAPS Institute and other professional development activities. We are convinced, based on our experiences last year with SACS and the research on our member profiles, that HAPS needs to be offering more opportunities for professional development to complement those at annual and regional conferences. The new courses at San Diego (see Kevin Patton’s article below) are a start, but we have much bigger dreams—and they will cost money to implement. With this in mind, our task force is investigating opportunities for attracting grant money from programs at the NSF and elsewhere. Look for updates later in the year. If anyone wishes to be part of a team that puts together proposals, please contact Kevin Patton at kpatton@stchias.edu or Amy Way at away@lhup.edu. If you have experience, great! If not, bring a sharp mind, writing skills, and a willingness to learn. It could be a great professional development experience for you. And, of course, we are looking into offering web-based courses. Have ideas? Please let us know!

Our sixth planning group worked on the challenge of “Life after Ferguson Management” that was discussed earlier in this column. They got us on track for the search process that is starting immediately.

I hope you are as impressed as I was by the great work done by your leaders in New Orleans. We move forward with a much clearer picture of where HAPS is going and how we can get there. We are going to grow bigger, offer more value to our members, and continue to foster the great collegiality that has been the HAPS trademark. Many instructors, who are not members yet and their supervisors and deans, will be taking notice and asking, “Why are we not a part of that society? We need HAPS.” And they do!

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**Taking HAPS to the Next Level: Introducing the New HAPS Institute (HAPS-I)**

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It is a common experience among HAPS members often recollected (and perhaps slightly exaggerated) at our social gatherings and shared with “first-timers” at our conferences: *my eyes were never fully opened to teaching A&P until I attended my first HAPS meeting.*

I think we all fondly remember our “first time” and how our professional lives as anatomy and/or physiology instructors seemed to take a quantum leap to the “next level.” We discovered an odd assembly of (odd) folks from all over North America who do what we do (at least “sort of”) and are eager to share their triumphs and failures—and to grow together. Folks who are not afraid to call up a Nobel Laureate or some other high-power scientist and ask them to come and chat with us about what their work means for undergraduate students. Folks, who are willing, bring us their favorite toys to show us how we can use them in their own courses. I do not think any of us can deny how useful HAPS has been in providing us the tools and the personal connections that have helped us develop into the teachers that we are today.
HAPS, as a vehicle for professional development in our multidisciplinary field, is now widely recognized and appreciated by educators, scientists, professional societies, and government agencies. But being the kind of folks that we are, we ask ourselves, “Is there more?” Our HAPS Board of Directors has been pondering that question for some time and they recently suggested an answer: YES! Of course. We can always do more. But more of what? And to what purpose?

The answers? More (and deeper) of what we are all about: improving A & P education for our students. The purpose being to support our members in delving even more deeply into the concepts we teach, especially new discoveries, and developing the best practices of teaching and learning in our field. That is, to take another quantum leap to the next level.

To facilitate our leap to the next level, HAPS has initiated a new program: HAPS Institute (HAPS-I). For nearly a year, a small task force* has been working with the Board and Steering Committee as well as universities, colleges, professional societies, and others to develop the vision and clarify the concept of HAPS-I. Another task of this group has been to lay the groundwork for the organization and administration of HAPS-I and to develop pilot courses.

The mission of HAPS Institute is to provide opportunities for deeper learning experiences within the larger framework of the HAPS that we all know and love. Our goal is to offer an ongoing program of short courses that feature focused explorations of topics relevant to teaching undergraduate anatomy and/or physiology. A unique characteristic of our program is that each course will also highlight some of the best practices in providing effective learning opportunities for our own students.

We envision a full slate of courses that incorporate a variety of learning venues such as seminars, face-to-face and online discussions, directed readings, field trips, experiential learning modules, and more. Our goal is to provide courses at our annual conference as well as at regional meetings. We also expect to offer online courses as well as courses that meet independently of other HAPS events. Of course, we also propose to offer a variety of courses that cover the whole spectrum of subjects related to the typical A & P curriculum.

Pierce College (Washington) will provide us access to their professionally-supported online learning management system (Blackboard™). This allows HAPS-I to have a uniform and seamless platform for delivering course components, facilitating communication among faculty and learners, and managing all of our courses.

The HAPS-I team has already been working closely with the education experts at the American Physiological Society (APS) and other organizations to make the best use of available resources and to ensure that our respective professional development programs complement rather than compete with each other. We are also actively pursuing grants and other sources of funding that will help relieve the financial burden from individual HAPS members.

HAPS Institute is focused on providing meaningful courses of high quality that will be recognized as appropriate credentials for those teaching human anatomy and/or physiology. To ensure the value of a participant’s credentials, we have partnered with the University of Washington (Seattle) to provide transcripts for our courses and to award professional continuing education units (CEUs) or graduate credits for each course.

At the 2007 HAPS Conference in San Diego, we will offer two pilot HAPS-I courses. We have been working with Kevin Petti and the San Diego team to integrate each course into the conference experience.

One pilot course, entitled Topics in Anatomy and Physiology, will explore the variety of topics presented during the Update Seminar portion of the San Diego program. Participants will receive directed reading assignments in advance of the conference, will participate in the seminar program at the conference, including a special luncheon meeting on Sunday, and will then participate in moderated online discussions of the topics after the conference ends. Participants will also produce an appropriate learning module that will be peer-reviewed for possible publication in the HAPS-EDucator and other professional publications.

The other course, Renal Biology, will focus on concepts within the topic of kidney structure and function. Like the Topics course, the Renal Biology course requires directed reading before arriving at the conference. It will also feature a related Update Seminar presentation (sponsored by and coordinated with the APS Teaching Section) and a full day of face-to-face learning activities during the first workshop day. Participants in this course will also create a peer-reviewed learning module for possible publication.

This is just the beginning! We are still making this up as we go along, of course, and we need your feedback and your help. First, we want to thank all of you who gave your time and effort by filling out the survey on continuing education you received at last year’s annual conference in Austin. Data from that survey helped us to get a solid, informed start.

Second, we ask each of you to consider participating in one of our pilot courses and to help us refine our model and work out any kinks that we may bump into.

Third, we strongly encourage you to consider coming to our HAPS-I Open Forum during the second workshop day in San Diego. There, you will hear the latest news about HAPS-I and also be invited to ask questions and offer suggestions.

Last, we encourage you to think about what other kinds of quality courses and learning experiences that HAPS-I can offer and then share them with us.

For the latest details about HAPS-I (including course registration information) or to contact us, please visit us at the HAPS website.

And hang on tight! We are about to leap . . .

* The HAPS-I Task Force includes: Ellen Arnestad, Jennifer Lundmark, Kevin Patton, and Amy Way (consultants: Joe Griswold, and Sandy Lewis).
Electing the Leadership: Descriptions of the Offices to be Filled in the 2007 Election

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For the first time HAPS will be holding online elections through the web site. Candidate statements were posted in early March to the Officer Candidates 2007 link on the Members’ Area of www.hapsweb.org. The ballot will be a new forum page that becomes available in early April and the polls will close on May 16, 2007. As always, the election results are announced at the business meeting (Monday, May 28th) during the annual conference (HAPS’07), which is being held in San Diego, CA.

Your Nominating Committee this year consisted of Margaret Weck (Chair), Karen McMahon, Valerie O’Loughlin, and Henry Ruschin. We took the names that came to us during the open nominations period and did our best to find two qualified candidates for each office. During 2007 we are holding elections for the following offices:

President-Elect: The office of President-Elect actually involves a three-year commitment (first as President-Elect, then President, and, finally, as Past President). The year as President-Elect is a training period that includes a position on the Board of Directors and helps create a smooth transition to the presidency the following year. The President-Elect works closely with the President and is privy to all of the decision-making and most of the correspondence of the President. During this training year, the President-Elect is responsible for chairing the Nominating Committee of the next election and serves on the Partner Associations Committee to develop relationships with other professional societies.

Secretary: The Secretary of the Board is a voting member of the Board responsible for maintaining minutes of all Board meetings and tracking Board action items. The term of office of the Secretary is two years and two consecutive terms may be served.

Regional Directors: The four Regional Directors are elected by the entire membership and exist to ensure that there will be individuals from across the continent serving on the Board of Directors. A map of the geographical boundaries of each region can be viewed in the Members area of the HAPS web site (wwwhapsweb.org). Each Regional Director is responsible for communicating with his/her constituents via written communications at least twice a year. They are also expected to serve as members of the Regional Conference Committee to promote local/regional conferences in their respective regions. Whenever feasible, the Regional Director will provide an official HAPS presence at regional conferences within their own regions. Regional Directors are also responsible for support and communication with various HAPS committees that are assigned to them. Regional Directors are elected with staggered terms so that two of the four Directors are elected each year. Directors serve two-year terms with the opportunity for re-election to a second consecutive term. In 2007 we will be electing the Southern and Central Regional Directors.

What follows are the candidate statements from the HAPS members who have accepted nomination for office in HAPS. Fuller statements containing a bit more biographical information are available in the Members area of the HAPS web site (wwwhapsweb.org); follow the link for 2007 Election.
Meet the Candidates

Candidates for the Office of President-Elect 2007-08
(will become President in 2008-09 and then Past President in 2009-2010)

Kevin Petti
I am both honored and pleased to be nominated for the office of President-Elect of the Human Anatomy and Physiology Society. It is my firm belief that HAPS is the single most important professional organization in the realm of undergraduate human biology education. Serving as President-Elect, and ultimately as President of HAPS would be a privilege.

I have been involved with HAPS since 1994 when I attended the national conference at Portsmouth, New Hampshire. At that conference I established many professional contacts that I have maintained to this day. These relationships have proven vital to my maturation as a teacher and have also grown into many dear friendships. This combination of professional development and personal friendship is a feature that makes HAPS unique.

I have attended every HAPS conference since Portsmouth, save Calgary, and have presented workshops addressing the relationship between art and science at six conferences. I also served as membership chair from 1997-2001, with my greatest contribution being the development of printed promotional materials and the first new member’s packet. Presently I am serving as Conference Coordinator for the 21st annual HAPS conference (held in San Diego in 2007).

My desire to serve as President-Elect is based upon the feeling that now is my time to serve an organization that has served me so well. I believe that my history with HAPS qualifies me for the position. I feel that I have established the necessary contacts within HAPS to adequately utilize the human capital that is the membership. I am well acquainted with both the vendors who attend the conferences, as well as our associated professional organizations. I also have a history with HAPS that provides me with insight as to who we are and where we have been.

As President-Elect, I plan to not only strengthen the ties between HAPS and outside organizations, but also to prepare for the challenges that HAPS will face in the coming years. I believe our greatest challenge will be to secure a contract with a firm that will provide HAPS with comprehensive office management services at a competitive price. I will also place high on my agenda the continuation of what HAPS does best: Promoting Excellence in the Teaching of Human Anatomy and Physiology.

John Waters
I am excited to be nominated as President-Elect this year. I have been a member since 1994, when I met with the Board of Directors to discuss creating the first HAPS website. With the exception of Portland, I have attended every annual conference since then and have presented workshops on electromyography, rodent survival surgeries, virtual reality in the classroom, and the efficacy of dissection and prosection in teaching labs. I can trace almost every positive event in my career to people I have met through HAPS, and I am eager to serve you as President.

Shortly after joining HAPS, the Board of Directors appointed me Webmaster, and while our first website pales in comparison to our current site, it marked the beginning of our web presence. In 2000, I stepped away from the website when I was elected to the Board of Directors as Treasurer. During my term as your Treasurer, I learned how hard the members of the Board and Steering Committee work year round to serve the membership. After my term as Treasurer ended in 2002, I served on the Animal Care and Use Committee for two years.

In 2003, I began working on a PhD part-time and will defend this summer. My research focuses on identifying effective methods in anatomy education and resulted in three presentations at HAPS annual meetings. This is another example of how integrated HAPS has become into my life. HAPS members collaborated on every chapter of the dissertation, and one HAPS member is on my committee. I believe HAPS’ greatest strength is its potential to improve almost every aspect of our teaching careers, and as President, I will work with the Board and committees to continue supporting our members. My experiences convince me that HAPS members are especially well suited to test assumptions about education and evaluate new possibilities. In addition to the support and friendships our organization has always offered, I would like to see us provide a peer-reviewed forum to explore and share our ideas and continue providing both logistic and financial support to members who wish to apply and build upon what we know about excellence in anatomy and physiology education. This is our mission as an organization, and that will be mine if you choose me as your President.

Candidates- continued on page 8
Candidates for the Office of Secretary 2007-09

Mark Bolke
After having served as Secretary for two years, I am honored to be asked to seek re-election. The experience of working with the Board of Directors has reinforced my impression of HAPS as a professional, yet accessible and informal organization. HAPS has been instrumental in my development as an instructor by providing a means to set and maintain high classroom standards and expectations, to learn new material and apply it in the classroom, and to share and troubleshoot issues with fellow A&P professionals. HAPS provides the support for us to excel as A&P educators. HAPS makes all of us better. Since becoming a member, I have attended most of the annual conferences, helped host a regional conference in Vancouver, Washington, served on the HAPS Testing Committee, and served as Secretary for two years. In addition, I represented HAPS at the Northwest Biology Instructors Conference in the spring of 2005.

In the midst of my 13th year at Clark College in Vancouver, I have recently been elected Life Sciences Department Chair by my colleagues and will begin serving in September 2007.

I would like very much to continue to serve HAPS. HAPS provides valuable opportunities for networking and learning for both new and experienced faculty. With the advent of our new continuing education program, HAPS will further its role as a leader in Anatomy & Physiology education excellence. I am excited about the direction in which we are headed. Qualities that make me a good secretary are integrity, diligence, and seeing that things are done correctly and to completion. If elected, I will continue to serve HAPS to the best of my abilities. I hope to further the mission of HAPS by continuing to perform duties in a timely and accurate fashion to facilitate efficient functioning of the Board. Thank you for your consideration.

Elizabeth Hodgson
Please see the information on the website.

Candidates for Director of the Southern Region 2007-09

Wanda Hargroder
Attending a conference for the first time and knowing absolutely no one can be somewhat intimidating unless it is a HAPS conference. As soon as I arrived in Philadelphia for my first HAPS conference, I was keenly aware of the sincerity of its members and the level of commitment to the profession of teaching anatomy. Coupled with the members overall ability to do this and have fun made me an instant lifelong member and advocate of the organization.

With this having been said, I have spoken to many within the organization of my willingness to get more involved and gradually assume leadership roles within HAPS. I am defending my dissertation on March 19th, 2007 and have timed my level of involvement with this milestone in my career. My professional title changes to Assistant Professor and Coordinator of Anatomy. It has been my involvement with HAPS that aided my quest to establish an undergraduate cadaver lab at our institution. This will a first for higher education within the state of Louisiana as only the three medical schools in the state had such labs prior to the one here at LSU.

I see great potential in HAPS. From the past and present leadership, I have seen a passion for teaching and a camaraderie among the members that speaks volumes for the future of this organization. I too have that passion and the willingness to maintain what HAPS is and the vision to help drive it to what it can become. There are so many professionals in this business who are not aware of HAPS and what they stand to gain by becoming a member. I want to be a steward of that message.

Please consider my earnest desire to become a leader within this solid and reputable professional group.

Mary Lou Percy
I am honored that the nominating committee has asked me to run for the position of Southern Regional Director. I first joined HAPS when the meeting was held in Beaumont, Texas in 1993. After the meeting in Portsmouth, I knew I had found the right professional organization for my career in teaching. The only annual conference which I have missed was Baltimore in 1999. Over the years, I have served two terms on the Grants and Scholarship Committee and I am currently in my second term on the Annual Conference Committee. In 1996 I helped with a regional conference held at Collin County Community College. It was a “shakedown cruise” for committee members of the 1998 annual conference held in Fort Worth. My contribution included soliciting 80 workshops and typing the summaries for the conference program. I was the conference coordinator for the annual meeting held in Austin in 2006.

What I find most appealing about HAPS is everyone’s willingness to share. One of my goals, if elected as a Regional Director would be to promote the collegiality found in HAPS. As teachers, we all teach similar topics year after year, but we never stop trying to find ways to improve student learning. The goal of HAPS is to promote excellence in teaching and I can contribute to that by fostering communication with the members in my region. Our general membership is not always aware of the activities of our officers and committee members. I believe more communication to our growing membership encourages participation in regional and annual meetings which leads to committee memberships and elected positions in HAPS. I have the qualifications, experience, and energy to serve our member-
Candidates – continued from page 8

ship if you chose to elect me. I welcome the opportunity to give something back by serving as your Southern Region Director.

Candidate for Director of the Central Region 2007-09

Judy Nath

It is with pleasure that I accept the nomination for consideration to the HAPS Board of Directors. I have been actively involved with the organization for fourteen years, energetically serving on several committees throughout my membership tenure, most notably, the Cadaver Use, Nominating, and Curriculum & Instruction Committees. I also served on the Board of Directors as HAPS Secretary from 1999-2001. Moreover, my commitment is evident in attendance at national and regional conferences every year since joining HAPS.

HAPS conferences provide avenues for collaboration, collegiality, and enhancement of the academic discipline. The member benefits are unparalleled. For example, my department has used HAPS-endorsed documents to 1) standardize our curriculum for both lecture and lab, 2) provide a competency exam to evaluate and compare our students with others across the U.S. and Canada, 3) assist with laboratory safety compliance, and recently, 4) build a cadaver lab. Personal affiliations have paved the way for improving teaching, corroborating with A&P instructors at other institutions, and authoring textbooks. Because I have gained so much from the organization, I feel an ethical responsibility to give back and shall perform all duties as assigned by the President or the Board.

As a Regional Director, I aim to serve in a new capacity by representing the central region to ensure currency and continuity of policies and procedures. In addition, I will encourage support of HAPS, disseminate information through various vehicles, and assist where needed to promote our society. As a liaison between the region’s constituency and the Board of Directors, I will communicate with the central region members annually and support increased involvement of the region’s membership in the activities of the Society.

I thank you in advance for your consideration and promise to fulfill the duties of Regional Director to the best of my ability.

FUTURE

HAPS ANNUAL CONFERENCES

2007 in San Diego, California
2008 in New Orleans, Louisiana
2009 in your city???
2010 in your city???
2011 in your city???

How about hosting an annual conference in your city? The format is already in place and you will get a lot of help from the HAPS business office and the marketing manager. It is not as hard as you might think! Go ahead! Explore the possibility!

If you are interested in possibly hosting a HAPS Annual Conference, please contact:
Izak Paul, Chair of the Annual Conference Committee
Mount Royal College
4825 Mount Royal Gate SW
Calgary, AB T3E 6K6 Canada
(403) 440-6173
(403) 440-6095 fax
ipaul@mtroyal.ca
Abstract:
An Anatomy & Physiology (A&P) community learning website, rich in resources, is being shared by students and instructors, with a view to enhancing the quality of our A&P program. Following release of the partially completed website on an experimental basis, months earlier than planned, without instruction, and advertised with only 5 posted flyers, over 80% of our A&P students are using some of the resources available. Student response, so far, has been entirely positive. Beginning in Fall '06, all A&P students, tutors, and instructors will be automatically enrolled and other students will be able to self-enroll.

Introduction:
Since 1995, East Tennessee State University (ETSU) has required students to complete courses with a “using information technology intensive” (UIT) designation. Each UIT course requires use of several information technologies, including technologies beyond those explored in freshman CSCI-1000, a specific online class with the title, “Using Information Technology.” At least half of the UIT requirement must be fulfilled among upper division courses within the major. Completion of CSCI-1000, and fulfillment of the UIT requirement are both requirements for graduation.

As a result of a campus-wide emphasis on information technology, our student-based tutoring programs became technologically advanced, and the need for student-tutors to find online instructional materials for inclusion in their tutoring websites was not being met. One possible solution was for A&P faculty to build a shared website, or community learning website, available to all faculty, tutors and students, which incorporated as many valued e-ancillary resources as possible.

A survey of 50 A&P lab students in Spring ’06 suggested that 98% of students would use some features offered in an A&P community learning website. We began working on a website, dubbed "the Portal," based on an analogy between the many people we hoped would contribute to the website, with the liver, which receives venous blood from many organs via the hepatic portal vein. In fact, the banner at the entrance to the Portal depicts the hepatic portal vein. But there are additional reasons for development of the Portal.

Our A&P program experiences intense competition from nearby community colleges which have expanded to offer night, weekend, and online classes, as well as classes at multiple locations. We hope that a powerful new learning resource, the Portal, will be highly valued by students, and will attract students back into our traditional A&P classes, which are not yet available at night, on weekends, or online.

As the Portal will be available for self-enrollment by any ETSU student, some students enrolled in A&P elsewhere, while simultaneously enrolled in other classes at ETSU, may self enroll in the Portal. We are hoping that a “viral marketing” effect will occur. A major objective of such a viral marketing ploy is to quietly send a message into a potential market, with the intent that the message will spread exponentially. Here, we are hoping that ETSU students who choose to take A&P courses elsewhere will spread word of the Portal. As word of the Portal spreads, we hope students will reconsider their decision to complete A&P classes elsewhere. In addition, as word of the Portal spreads, along with word of similar sites we are hoping that other ETSU faculty will create, students majoring at other colleges will be more inclined to consider enrolling at ETSU.

Further, only about half of our A&P instructors activate their default course websites. While our A&P instructional group does tend to select texts which provide e-ancillary material, most of our instructors do not make use of the e-ancillary material, and those that do generally use only a small fraction of the e-ancillaries available. The Portal provides an opportunity for all students enrolled in all sections of A&P to access e-ancillary material, regardless of the information technology (IT) proficiency status of their instructor.

Finally, our A&P program does not follow the recommended
The objectives of the Portal project are to:

1. Get all A&P students, tutors, and instructors to contribute and participate in the learning community's ongoing examination and discussion of material.
2. Provide students with the learning objectives used by the instructors.
3. Provide e-ancillary material to clarify and support learning objectives.
4. Make e-ancillary material and additional e-resources, including online Q&A discussion forums, available to all students enrolled in all A&P class sections.
5. Make e-ancillary material available to all tutors in all recognized tutoring programs on campus.
6. Provide Q&A discussion forums in which students may ask questions, and in which all tutors and instructors share the workload of responding.
7. Make a greater proportion of existing e-resources available to faculty for use in our multimedia classrooms.
8. Provide self-study, self-testing areas for students who miss examination of certain anatomical/physiological systems because they complete one A&P class at ETSU and another A&P class elsewhere.
9. Provide students with new learning materials not found in the textbook, such as audio recordings of lectures, and digital images of overheads used in class.
10. To provide a repository of e-ancillaries, and a working online example (guide/template) for instructors working at a novice IT level, but who would like to activate and use their own A&P course websites, and who might be interested in developing online classes.
11. Evaluate impact on negative outcomes (D's, F's, WF's, W's, and also, the enrollment rate in A&P II versus A&P I).
12. Survey students regarding use and satisfaction with the Portal.

Goals and Objectives:
The goals for creation of the Portal are below:

1. Our primary goal is to bring together the instructional and technological talents of a number of instructors in order to...
2. Increase learning, success rates, and satisfaction rates among all A&P students, and to produce better graduates in the health professions.
3. To reduce the workload on individual instructors, allowing them more time for other scholarly and service activities, and...
4. To increase enrollments in our A&P classes, particularly in A&P II, in which enrollment over the past two calendar years has been 48% below enrollment in A&P I.

Into Action:
The original plan was to put the Portal into operation on the first day of class in Fall '06. At the beginning of the semester we plan to meet with students to demonstrate how to access and use the resources in the Portal. However, as the Portal already contained resources (some only partially completed) which might be of value to students enrolled in Summer '06 sessions, we decided to activate the Portal in week two of the first summer session, and observations regarding student participation detailed in this report refer to student participation this summer, with two weeks remaining in our second five week summer session.

Resources in the Portal include random block practice tests (multiple choice, matching, and image identification); we now have nearly 4000 questions in subject pools, and we plan to ask instructors to rank questions in terms of value to their classes, with an aim to remove questions of lesser value. A longer term goal is to include comments and page references as replies to incorrect responses for each practice test question. A general discussion forum ("the JOINT") allows students to post anonymously if they wish, and students are encouraged to discuss anything they want relating to A&P; a response from an instructor, if necessary, is guaranteed within 24 hours, including holidays and weekends.

In addition, students are able to initiate their own chat sessions. PowerPoint™ presentations and general study guides covering lecture material are provided. Instructors report that the chapter learning objectives listed in the textbook used closely fit their lecture plans, therefore the learning objectives from the textbook are provided. Finally, links to other anatomy resources are provided, but only after we have carefully reviewed the websites to determine that they provide a significant amount of useful information, and that the information is in a highly usable format.

We met with the university Director for Tutoring Services and contacted the Tutoring program for the College of Nursing, asking that tutoring programs on campus consider using the Portal as a resource website. In fact, the Portal will become the website for official use by tutors hired through our university tutoring services beginning in Fall '06. While there were no official tutoring programs for A&P Summer '06, those programs will resume activities in Fall '06/Spring '07.

To advertise, we posted five copies of a single page flyer near the anatomy classes and labs. The flyers made reference to a new discussion forum, called "the JOINT", where students could talk about A&P, and the flyer informed students that "the JOINT" was within a Blackboard™ website called the Portal. Brief instructions explained how to access the Portal and how to self-enroll.

Preliminary Results:
Self-Enrollment

To become a participant in the Summer '06 pilot program, students must go online, log into the Blackboard™ course management system, locate the Portal website by searching through a course master list, and self-enroll. Participation, which is not a passive process, peaked at 60% by the end of the first five week summer session, but passed the 80% mark by week three of the second five week summer session. Participation remains less than predicted by our survey of 50 students in the previous semester, but these surveys were conducted in the classroom of an instructor who is a very active IT user, and whose classes may attract students who are very active IT users.
Educational Issues - continued from page 11

Membership has grown gradually, but has never ceased to grow. There have been periods of a few to several days during which enrollment did not increase, but new students have enrolled in each of the eight weeks of A&P completed so far this summer. We have surpassed the 80% self-enrollment mark with an advertising cost of five photocopies.

Message Posting in "the JOINT" (the general discussion forum):

There are currently 92 messages in the general discussion forum in "the JOINT." Two-thirds of the messages have been posted by students. Three different instructors have responded to questions, and in a few instances, more than one instructor responded to the same questions. Of all messages, 66% were posted outside of regular workday hours (0800-1630, M-F), and 21% were posted on weekends. Students chose to post anonymously 22% of the time. Posting appears to occur in waves and lulls, and we try not to get discouraged by the lulls, which sometimes last as long as 4-5 days.

Participation in the discussion forum appears to decline both before and after exams. Most, but not all, discussion threads deal directly or indirectly with lecture material. Some notable threads address Alzheimers, Picks Disease, epidural anesthesia, various aspects of metabolism and sensory physiology, and anatomic variation between individuals.

Submitting Practice Quizzes versus Accessing Practice Quizzes:

Only about 50% of students enrolled in the Portal actually appear to be submitting practice tests, although just slightly more than this are accessing practice quizzes. We have set up practice quizzes as random block tests, such that each time a student accesses a quiz on a given subject area for example, the special senses they get 10 different questions. Questions are multiple choice, matching, and image identification.

However, all students who access practice quizzes do not submit them. In addition, we do not have any record of how many times students attempted each practice quiz. Practice quizzes consist of 10 questions randomly drawn from pools. We currently have approximately 100 questions in approximately 40 topic question pools. While we have no way to know how many times students take each practice quiz, some students have successfully determined the total number of questions in some pools, indicating that they are accessing quizzes frequently, perhaps to find more questions.

Student Comments About the Portal:

We have received only positive feedback about the Portal. During each summer session, a small group of students has maintained what can only be called very constant e-mail contact with us, and they have frequently made suggestions to improve the Portal. We have made changes or additions in response to nearly every suggestion. Students have pressured us to provide practice quizzes, digital images of overheads, and digital audio recordings of lectures. We are doing so with increasing success. Instructors tell us that students are discussing the Portal in class, and are informing instructors that the resources are of value.

Statistical Tracking - Preliminary Observations:

During initial setup, we did not activate statistical tracking of items added to the Portal. We are going back and gradually activating statistical tracking of many items. If we divide the major resources available as, live chat, slide shows, lecture materials (audio/images), practice tests, and discussion forums, we find that there is no regular use of live chat; about 20% of students enrolled in the Portal appear to access slide shows and lecture material each week, and as many as 50% may be accessing the discussion forum and practice quizzes each week.

Just as all students accessing practice quizzes do not submit them, all students who access the discussion forum do not post messages. There does not appear to be any rhyme or reason to the composition of groups that access each resource each week. That is, while there is inevitably some overlap, the composition of the group accessing the discussion forum each week is not the same as the composition of the group accessing the practice quizzes in the same week.

Only a small portion of participants (10%) appear to have developed a habit of routinely seeking out all resources, including new sound and image files from lectures. Most students do not appear to restrict themselves to any particular resource. That is, a student who accesses practice quizzes this week may access slide shows in the following week, without returning to the practice quiz area.

Conclusions:

When working on the Portal, we look to student participation for inspiration. While nearly all of our students have been exposed to online learning resources and class sites, it is unlikely that any of them have been exposed to a shared resource site such as the Portal. Nonetheless, membership has climbed to over 80% of the students currently enrolled in A&P classes.

Most participants do not appear to use the resources available in a consistent manner. There may be a number of explanations. Students may simply not use resources in a consistent manner. A participant who is a multi-modality learner, for example, may actually alternate between resources in alternate weeks. Tracking such behavior would require far greater participant numbers and more exhaustive tracking and analysis than we have used so far. Alternately, participants may be exploring the Portal in an effort to find the resource(s) best suited to them.

We would like to see greater use of the general discussion forum, but look upon the 92 messages posted in the first 8 weeks of summer classes as dozens of opportunities for students to interact with instructors, opportunities that might not have occurred without the Portal. We hope that the ability to post anonymously and the ability to read and post messages outside of regular class hours will contribute to greater future success of the discussion forum. Students and instructors need to be encouraged to make greater use of the discussion forum as exams approach.

"Word of mouth," even by electronic means, remains a powerful messenger. By posting only five flyers about the Portal, student participation has exceeded 80%. This was achieved despite having to go online, log into BlackboardTM, search for the the Portal, and actively self-enroll in the website. Beginning in Fall '06, all students in all A&P sections will be automatically enrolled in the Portal, and the Portal will automatically appear in the list of BlackboardTM sites available to each student.

In closing, students do require instruction in the use of community learning sites such as the Portal, particularly if they have never seen anything like it before. Beginning in Fall '06, we will provide all A&P students with automatic access to the Portal. We will schedule multiple meetings with students about the Portal,

Educational Issues - continued on page 13
Educational Issues - continued from page 12

some during class and others outside of class. We want students to know the Portal exists, to be aware of the resources offered, and to learn how to make best use of them starting in the first week of class.

We acknowledge Myra Jones, Allan Forsman, Terry Lancaster, Jim Fulbright, and Brandon Ballentine for their contributions to the Portal.

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**Meat Is Muscle**

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What muscles are in bacon, or ribs, or New York steak? Professor Howard Swatland of the University of Guelph, Canada, provides the answers in an excellent on-line article “Growth and Structure of Meat Animals” which can be read at www.aps.uoguelph.ca/~swatland/gasman.html.

**Bacon** is pig rectus abdominis. The pork belly commodity market is huge because they are selling bacon. **Ribs** are intercostal muscles. **Flank steaks** are the oblique muscles of the steer’s abdomen.

Expensive beef steaks are from the posterior back of the steer, called the loin, where muscles like the longissimus dorsi and psoas muscles are tender because they were not exercised much while the animal was alive.

Here are some of the expensive cuts. **T bone steaks** are psoas major muscles. The T bone is a vertebra. **Porterhouse steaks** are a combination of longissimus dorsi and psoas major muscles with the vertebra. **New York steaks** are the longissimus dorsi portion of a porterhouse cut. **Filet mignon steaks** are the psoas major portion of a porterhouse cut. **Sirloin steaks** are cuts through the ilium of the steer’s hip and include the gluteus muscles. **Round steak** is a slice through the upper rear leg and contains quadriceps and hamstring muscles. The round bone is the femur.

Less expensive cuts are from the anterior of the steer. They are tougher because they were more heavily exercised in life. **Chuck** is shoulder and neck muscles. **Brisket** is the pectoralis major. **Shanks** are the front legs of the steer.

Professor Swatland includes many illustrations. Here is one showing the anatomical relationship of New York steak to filet mignon. Together they make a Porterhouse steak.

To practice muscle names, my students and I will stand up and repeatedly flex and extend antagonists while saying their names. For example, “iliopsoas, gluteus maximus, iliopsoas, gluteus maximus” while flexing and extending the hip. Then we switch to “filet mignon, sirloin, filet mignon, sirloin!” It brings home the connection between meat and muscle. Bon appetit!
Make Your Plans Now To Surf On Over To San Diego For HAPS 2007!

21st Annual
HAPS Conference
May 26-30
2007

Human Anatomy & Physiology Society

This year has more workshops and posters submitted than any previous conference, and the planned Update Seminar speakers are outstanding. Social events include a night of Padres baseball, dinner aboard the USS Midway Aircraft Carrier, special tours at the San Diego Wild Animal Park, and dancing at the annual banquet. All of this in combination with the beautiful San Diego environment should result in HAPS 2007 being the best HAPS conference ever!

Rooms at the Sheraton Hotel and Marina are going fast so be sure to book your reservation now to assure the conference rate. If you haven’t already received the pre-conference brochure in the mail, look for it soon. It has all of the necessary registration and event information. You can also go to www.hapsweb.org for the latest information. Click on the surfing skeleton to go to the conference web page. You can also contact Kevin Petti, HAPS 2007 conference coordinator at kpetti@sdccd.edu

See You in San Diego for HAPS 2007!
AAA’s 2007 Basmajian Award will be presented in May to Valerie Dean O’Loughlin, associate professor of anatomy and cell biology and director of undergraduate human anatomy in the Indiana University School of Medicine – Medical Sciences Program on the campus of IU Bloomington.

This award recognizes health science faculty who are in the formative stages of their career, teach human or veterinary gross anatomy, can document excellence in their contribution to the teaching of gross anatomy, and have outstanding accomplishments in biomedical research or scholarship in education.

According to Bruce Martin, professor of physiology at Indiana University, O’Loughlin “possesses the rare ability to be simultaneously entertaining and highly informative, and undergraduates are held in rapt attention throughout every class period. And for medical students, she has an enormous storehouse of contextual knowledge to satisfy the curiosity of even the most intense and insistent pupil.” O’Loughlin recently committed much of this storehouse to paper, co-authoring (with Michael McKinley) an undergraduate text, Human Anatomy, and is working on a companion text in human anatomy and physiology.

Beyond her exceptional “classroom management” skills, Martin notes, O’Loughlin “has mounted a concerted and successful effort to excel in the scholarship of teaching.” As one of the university’s most active participants in a consortium of faculty who study the “Scholarship of Teaching and Learning,” she works to develop, review, and assess new strategies to enhance student learning and performance.

According to nominator Anthony Mescher, senior fellow at the Indiana Institute of Cellular and Molecular Biology, the “significance of O’Loughlin’s enthusiasm for and commitment to the scholarship of teaching is that she has helped to elevate the status and importance of good teaching for all our faculty, with a major beneficial effect on the entire faculty and our mission.”

In addition to her teaching excellence, O’Loughlin conducts a research program in cranial deformation and craniosynostosis on formation of the endocranial vessels, using both human and animal models. This work was recently featured in a Learning Channel television special on cranial deformation, which, Mescher says, “testifies to the quality and importance of her approach to the study of endocranial vasculature.”

O’Loughlin received her undergraduate degree in physics and anthropology from the College of William and Mary and her Ph.D. in biological anthropology from Indiana University. Since 1995, she has been a member of the Indiana University School of Medicine faculty, where she teaches human gross anatomy to first-year medical students and basic human anatomy to undergraduates. She has won several teaching awards and grants, including a Teaching Excellence Recognition Award and a Trustee Teaching Award, Indiana University’s highest accolade for teaching.

O’Loughlin is an active member of the American Association of Anatomists (AAA), the American Association of Physical Anthropologists (AAPA), and the Human Anatomy and Physiology Society (HAPS), among other organizations, and is currently serving on AAA’s Membership Committee.

This year’s Basmajian Award committee was chaired by Benedikt Hallgrímsson; other members were Robert Hinton and Anna Lérant. The award will be presented at the AAA Awards Banquet in San Francisco on Tuesday, May 1.

To submit a nomination for next year’s Basmajian prize, check the awards guidelines on AnatomyLink – www.anatomy.org. Nominations are due December 1.

Reprinted with permission from the AAA Newsletter, published by the American Association of Anatomists, March 2007.
The Northwest Regional HAPS Conference, co-hosted by HAPS and Pierce College-Puyallup, was held November 3-4, 2006 on the campus of Pierce College-Puyallup. It was highly successful, with 90 attendees, eight exhibitors, seven sponsors, 32 student helpers, and tremendous support from Pierce College administrators, staff, and faculty.

Conference activities began Friday afternoon with registrations, greeting old HAPS friends, and meeting new A&P colleagues. The afternoon activities continued with two separate and well-attended sessions demonstrating the stereo (3D) version of the Visible Human Dissector, presented by Tom Weinert from Touch of Life Technologies.

In the early evening, a lively social reception, sponsored by McGraw-Hill, was held in the dining area with drinks and snacks provided. The social reception was to be only 45 minutes long, but was extended 20 minutes when we learned of two major auto accidents on I-5 and HWY 512, which had some attendees stranded in stop-and-go traffic. The dining room in Pierce College-Puyallup’s new college center building was very nicely decorated by the college’s caterer (Chartwells), where each table was set with burgundy tablecloths, lovely centerpieces, and napkins which flowered from each of the water goblets. It was really quite a sight with a podium set up on one end, a two-line buffet set up in front, and around the periphery of large room eight exhibitor tables, a HAPS table, and a table with flyers and goodies from AAA and APS. I only wish I had taken a picture of it! Topping the ambience was the outstanding food! We could have made a fortune selling the vegetable lasagna recipe!

Following dinner, we moved into the adjoining multipurpose room for dessert, coffee, tea, and our keynote presentation. Jason Edwards, our keynote speaker, gave an outstanding, informative, and very inspiring talk and slide show on the physiological challenges of high altitude mountaineering. Having led four successful Mt. Everest expeditions, he was able to share many first-hand experiences. His presentation generated a lengthy question-and-answer period and much discussion the following day.

Saturday morning attendees enjoyed coffee, tea, bagels and cream cheese before heading into the lecture hall for the morning presentations. Beginning the day, Conference Coordinator Sandy Lewis welcomed attendees and explained some of the ongoing efforts by HAPS, in cooperation with the University of Washington and Pierce College, to establish continuing education opportunities for instructors of undergraduate A&P education. Sandy then introduced Christine Eckel, HAPS Western Regional Director, who explained what HAPS is all about and encouraged non-HAPS members to contact her if they were interested in joining the organization. We were then honored to have Dr. Tana Hasart, President of Pierce College-Puyallup, warmly welcome conference attendees to the college. Dr. Hasart shared her support of our organization’s mission and wished participants a rewarding conference experience.

The welcome was followed by our two morning speakers. The first speaker was Dr. Matthew Smith, Assistant Professor of Biology at Pacific Lutheran University. Dr. Smith’s presentation examined the mechanisms by which estrogen modulated the actions of hypothalamic gonadotropin releasing hormone (GnRH) neuron activity, and the role GnRH neuron activity plays in regulating fertility. His presentation generated some interesting questions from the audience. Following a half-hour break, we were entertained by Ellen Arnestad from Southern Alberta Institute of Technology, who gave her presentation on developing humor for the science classroom. She shared some of the ideas which she has already successfully developed and then gave attendees tools to use to develop some classroom humor of their own.

Our informal lunch provided an opportunity to network and visit with exhibitors. Of course, no HAPS conference would be complete without door prizes! Most of the door prizes donated by our dedicated exhibitors were given out during the lunch break, and we had some very happy and lucky folks walk away with some awesome goodies to take back to their home institutions.

Afternoon workshops began after lunch. Workshops are successful when presenters are enthusiastic and well prepared and participants are actively engaged. This was definitely the case all afternoon as participants chose three of eight different workshops to attend. The conference workshops and presenters are listed below.

Also listed below are the sponsors and exhibitors who contributed so much to the success of our conference. Thank you once again for supporting HAPS!

1. Physiology for Physiology Teachers: Helping Students Visualize Mechanisms (two-hour workshop)
Harold Modell (Director, Physiology Education Research Consortium)

Students often view physiological mechanisms in descriptive terms from a perspective that does not help them recognize causal relationships. The “view from the inside” is a technique that helps students focus on factors contributing to causal relationships. Attendees of this two-hour workshop participated as students using this technique to engage in exercises dealing with mechanisms that students find difficult to understand.
Regional Report - continued from page 16

2. Interactive Study of Anatomy Using the Visible Human Dissector
Tom Weinert and Geoffrey Smith (Touch of Life Technologies)

This “hands-on” workshop gave the participants a dissection experience based on the VH Dissector™, a computer-based virtual cadaver from Touch of Life Technologies. The Dissector gives the user the unique ability to explore both the full male body and the female pelvis in cross-sectional and three-dimensional formats. The anatomy can be referenced by region, system, index searches, pre-scripted lessons, or any combination of the above. The VH Dissector™ is implemented in medical schools as a complement to full dissection programs, as well as in cadaver and non-cadaver labs at universities, community colleges, and high schools. Third party and user-developed lessons and lectures are available which provide intuitive access for medical and allied health disciplines.

3. Pierce College Nursing Admissions Seminar
Hope Roberts (Pierce College Nursing Program Coordinator), Kelley Emanuelson (Pierce College ADN Program Applicant Stephanie Joy (Pierce College Faculty)

Discussion was on the philosophy and purpose of the Pierce College Nursing Program. Questions about the selection process and principles behind it were addressed. An open forum format enabled interaction with members of the nursing department, students in the program, past selection committee representatives, and past applicants.

4. Tales from the e-Trenches
John Arle (Phoenix College Professor and A&P Software Developer)

This session provided an overview on general online pedagogy for both lecture and lab content with an emphasis on integrated instructional/educational technologies. A lesson design template (see below) was shared along with formal and informal assessment techniques. The critical importance of both lesson design and effective instructor engagement was addressed as well.

I. Lesson Design Template (an example)
   A. Introduction
   B. Objective/Competencies
   C. Instruction
      1. Conceptual “lecture” content
      2. Lab content & interactivity
   D. Self Assessment
   E. Expressing Your Learning (essays)

II. Communication
   A. Class Bulletin Boards
   B. E-mail

III. Formal Assessment
   A. Take-Home Tests
   B. Proctored Exams

5. “Anatomy and Physiology Revealed™”: Experience the Cutting Edge in Anatomy and Physiology by Peeling the Real Deal.
Peggy Lucas (McGraw-Hill)

This workshop enabled participants to experience the exciting software that is re-vitalizing how students learn A&P. Anatomy and Physiology Revealed™ is a 4 disc series that covers skeletal and muscular systems, nervous system, cardiovascular, lymphatic and respiratory systems, and the digestive, urinary, reproductive and endocrine systems. Each CD contains the following functions: dissection, animation, imaging, and self-test. This easy-to-use software is unlike anything in the A&P world today.

Sandy Lewis, Facilitator
Student/Faculty Roundtable Discussion (Current and Former Anatomy and Physiology Students)

This lively student/faculty roundtable discussion was facilitated by eight students and eight instructors and enabled students to discuss those aspects of A&P instruction which were most beneficial, those aspects which were most frustrating, and other factors which did or did not contribute to their success in learning human anatomy and physiology. It also provided an opportunity for instructors to explain to students why they use certain teaching methodology.

7. Adventures in Transitioning to Online A&P
Margery Halstead (Faculty Member, Tacoma Community College)

This session covered the “nuts and bolts” practical issues surrounding converting a traditional A&P class to a hybrid-online format. An active Blackboard™ classroom was used as a working example. Pacing, course materials, curriculum delivery, and assessment techniques were discussed. Instructor-developed online resources to assist with tissue recognition, bone markings, muscle identification, and cat dissection were also highlighted.

8. Northwest Medical Team’s OT/PT Work in Moldova: An Educational Experience.
Kim Lewis (UW OT Grad Student /2006 NW Medical Team Member)

Occupational therapy graduate student, Kim Lewis, presented an inspiring and informative slide show and overview of her experiences as a member of the September 2006 NW Medical Team’s Rehab Mission to Chisinau, Moldova, in Eastern Europe. She also provided information on opportunities for other allied health professionals to travel with NW Medical Teams. Many questions on the Moldovan “medical culture” followed Kim’s presentation.

9. Browser-based Physiology Experimentation
Jacki Reeves Pepin (ADInstruments)

LabTutor™ technology platform has created new directions for life science educators and their curriculum. This workshop explored the benefits of combining html content with current data acquisition systems. Theory, protocols, data recorder analysis, and reporting integration can streamline the student’s laboratory experience.

Regional Report - continued on page 18
HAPS is extremely grateful for the generous support of the following event sponsors:

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Event</th>
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<tbody>
<tr>
<td>ADInstruments</td>
<td>Mr. Jason Edwards’ Keynote Presentation</td>
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<tr>
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<td>Dr. Tana Hasart</td>
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<tr>
<td>Wiley</td>
<td>Lunch/Door prizes</td>
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<td>Dr. Mathew Smith’s Presentation</td>
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<tr>
<td>McGraw-Hill</td>
<td>Friday evening reception</td>
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<tr>
<td>Elsevier</td>
<td>Door prizes</td>
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<tr>
<td>Wards</td>
<td>Door prizes</td>
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<tr>
<td>BioCam</td>
<td>Door prizes</td>
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</tbody>
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Northwest Regional Conference Exhibitors:
- ADInstruments
- American Association of Anatomists
- American Physiological Society
- Elsevier
- Mad Science of Pierce County
- McGraw-Hill
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egorski@ccbcmd.edu
HAPS COMMITTEE REPORT

HAPS Public Relations Officer

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The HAPS Board of Directors recently appointed David Evans to be the Public Relations Officer (PRO). PRO's generally try:

1) To raise favorable public opinion for their groups, candidates, or products. I have been working on getting our meetings and speakers into local news outlets. To that end, if you know of some member of HAPS in your area who judges science fairs or who has been appointed or elected to some special position, please let me know. Here are the “W’s” or the basic list of things you will need to provide: who, what, why, where, when. I will, at the very least, get this information onto a planned-for section of our homepage. On the other hand, do not necessarily expect to appear on the NBC Evening News.

Naturally, if you are planning a regional or annual conference of HAPS, we need to plan to inform the local publicity outlets. For example, last fall I notified several electronic media and press outlets in Monroe Co., NY about our Eastern Regional Conference. I know that the chairs of these conferences are very busy but please realize that these are our optimal opportunities, especially with great speakers, to bring favorable light onto HAPS.

2) To work with partner associations such as the American Association of Anatomists, American Physiological Society, American Institute of Biological Sciences, National Science Teachers Association, National Education Association; I am sure there are more potential partner associations and I would like to hear about them. Our collective drive can bring about important changes in public policy—just think of what we could do with the accreditation issues if we worked together! We need to improve our influence on public affairs deemed by the BOD to be vital to our collective HAPS interests.

3) And to improve communications within HAPS about information important to our members. I have sent out a stream of items to the BOD and to the HAPS-L about matters of concern:

- Accrediting issues and accreditation agency certification (yes: they ALSO have to prove themselves);
- Changing personnel in the US Department of Education;
- Change in the Chair of the US House Education Committee and a new Chair of the House Higher Education Sub-Committee;
- New legal issues potentially impacting members including: a new law regulating protests against the use of lab animals, student free speech issues (on T-shirts!), funding changes, and Darwin in the schools.

Here is an example of this fourth point. Does a student in a Pennsylvania college or university have an absolute right to free speech? This idea may cause chaos in Pennsylvania laboratories and lecture halls one day as it has been seriously considered in the state legislature. This debate is becoming a national trend, and we need to keep our eyes open for this kind of thing.

Here are the main reasons for my writing this article:

PLEASE:

- be my local eyes and ears for anything that could cast a positive light on HAPS; let me know as soon as possible;
- if you want to help me, step forward and join my ad hoc group (I will even split my HAPS salary with you!);
- if you know any HAPS member who has done something wonderful or even mildly pleasant, email me before it goes cold;
- if you know a reporter, become that person's best friend;
- if you are planning a conference, send me the names, titles, abstracts of your most interesting speakers as soon as you know them;
- send me the email addresses and call letters of all electronic media and the email addresses of the local desks of all the print media in the area of your conference;
- if you find the media coverage for your conference has been insufficient, give me some feedback, so that I can improve on my job performance;
- and finally, give me all sorts of advice and feedback.

Let us all work together to take the HAPS light from under the bushel basket.
HAPS Grants and Scholarships News

Amy Way, Chair HAPS Grants and Scholarships Committee
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Congratulations to this year’s Robert Anthony and Adjunct Faculty Scholarship recipients!

Please congratulate these individuals and welcome them
to their first Annual Conference when you see them in San Diego.

April Collins-Potterfield
Robert Anthony

Kim Hansen
Robert Anthony

Valory Thatcher
Robert Anthony

Kelley Grorud,
Robert Anthony

Lori Sue Chabitch,
Adjunct Faculty

Committee Reports - continued on page 21
The long-term goal of the HAPS Safety Committee has been to promote an educational setting that is healthful and safe for the students as well as for the instructor(s) who work in an Anatomy & Physiology laboratory. To insure a safe laboratory classroom, the HAPS Safety Committee has developed the HAPS Safety Guidelines and has continued to update its contents and recommends its use as a guide for HAPS instructors.

During the academic year 2005-2006, a short chapter on long-distance learning, eligibility for accommodation of students with disabilities, emergency response plan during power outages due to inclement weather, and a note on prions were added to The Guide. In addition, a Safety Spotlight at hapsweb.org has featured a revised benzene safety standard and a list of lab safety products from non-latex and powder-free gloves to mylar-wrapped capillary tubes.

More recently, HAPS members have made inquiries regarding vaccinations, the use of fresh specimens, and chemical exposure of the pregnant; these have been addressed by the committee. As a result, certain sections of The Guide have been modified and/or added as appropriate. These include modifications of the sections on Students with Special Needs, Body Fluids (Exposure Control Plan for Blood-borne Pathogens), and Dissection Specimens (Fresh Materials).

Currently, topics such as the use of plastinated specimens (i.e., cadavers, organs, etc) as a safe alternative to preserved cadavers and specimens, and A&P laboratory issues as they pertain for the physically challenged student (i.e., lab equipment designed for their safety and convenience) are further being explored by members of the Safety Committee. The Committee also foresees collaborative efforts with other HAPS committees (i.e., Animal Use, Cadaver Use, etc.) in activities that may involve shared service to HAPS in the near future. These topics and more will be the bases of discussion by the Safety Committee at the HAPS Annual Meeting in San Diego in May 2007.

If you would like to contribute your time and active participation with the Safety Committee or simply would like to ask a question about lab safety, please feel free to email the Safety Committee Chair Rema Suniga at r-suniga@onu.edu, or better yet, come join us during the Safety Committee meeting over lunch on the first day of workshops in May.

Have a safe year!

Thanks to all current and past members of the Safety Committee who helped in the development of the Safety Guidelines

The Safety Committee
2001-2007

Elizabeth Becker
Paul Boehlke
Laurie A. Choate
Sandra G. Lewis
Karen McMahon
Bonnie C. Revelle
Edna J. Steele
Rema G. Suniga
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Peter E. Hogan
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Collen Nolan
Donna L. Ritch
Amanda Starnes
Glenn Yoshida
Michael Slaughter
Patricia Oslund
Margot Williams
Elizabeth Pennefather-O’Brien

♦
It’s 11:00 PM. What are these Students Doing in the Physiology Lab?

Believe it or not, they’re learning physiology.

Who said learning can’t be fun. Not iWorx. In fact, iWorx has made fun and excitement an integral part of their physiology labs since 1991.

iWorx physiology teaching solutions are focused on the student’s learning experience. Hardware, software, and courseware all work seamlessly together to keep students engaged with the lab and not distracted by quirky transducers, recorders, black boxes and connectors. And with data recording and analysis software that is point-and-click easy, students can learn and satisfy their curiosity at their own pace, even into the wee hours of the morning.

Thousands of students from hundreds of universities and colleges use iWorx teaching solutions to learn physiology in more interesting ways. Let your students have some fun too.

Schedule an iWorx lab demonstration at your site and receive the iWorx Web Teaching Tools CD free ($300 value).

Contact us today at 800.234.1757 or info@iworx.com.
This workshop and subsequent paper is an update of articles from the May and August 1999 issues of HAPS-EDucator, where additional useful model repair information can be found. These issues are available at the HAPS-BEN archive on the HAPS website (www.hapsweb.org). Some large-model techniques will be found in the 1999 papers.

WHY MODEL REPAIR?
Models are essential tools for students, but they are expensive. Handling will result in wear and tear, and outside repairs will require downtime that students can ill afford while they study for lab practicals. Sending models out for repair usually is expensive.

Many repairs can be made in the laboratory with simple tools and a little effort by even unskilled personnel. Tools and materials can be purchased locally at affordable prices. Lowe’s, Wal-Mart, Ace Hardware, and Radio Shack are suppliers that have been good sources for virtually all needs.

The usual problems encountered with models receiving heavy student use include:

a. Fasteners—pins break and sleeves wear out. The pins mounting parts to each other are of several types, mostly depending on the model’s age.
b. Identification numbers—constant use can wear them down, and more use can be made of models by numbering more items than originally indicated.
c. Catastrophic damage—even completely shattered models can be placed back in service with a little effort.

The most frequent source of problems is the forcing of parts of one handmade model onto another. A useful solution is to number or letter each piece of a model with the same symbol, thus indicating at a glance when pieces are mismatched. Cramping pins into misplaced holes or bending pieces to force them together can result in serious damage, which can usually be fixed.

Caution: Wear goggles when doing repairs, especially when using bolt cutters and power tools!!

NEW TOOLS AND HINTS
In addition to common tools reported in the 1999 articles (Fig. 1), some recent useful items follow:

Vises are extremely useful and can be purchased usually for few dollars. My current favorite is an adjustable model that mounts via a very strong suction cup that gives admirable stability on smooth lab tabletops with no damage to the mounting surface. This vise adjusts to any angle, has grooved jaws (good for holding pins and rods) and has rubber jaw inserts for gentle pressure on delicate parts.

Taps and dies, all of which may be found at Sears, Lowe’s and Ace Hardware, are less familiar to novices than many other tools. Dies are used to cut threads on rods; various sets are available. Decide what sizes of rods will fit your needs (usually 1/8”-3/16”) and purchasing only dies of the desired sizes, usually about $4-5 apiece. A drop of oil on the rod is good for speed and to prevent jamming. The die wrench is usually not necessary, since fingers or a normal wrench would do (Fig. 2), but the die wrench is handler, more stable, and is a blister-saver in big jobs.
Taps are used to thread appropriately sized holes for threaded pins and are advisable in delicate situations; in others, the pins themselves cut threads in the plastic. Most taps come in packages that list appropriate drill sizes and dies to use. I usually use 1/8” pins made of brass or steel, with occasional use of 3/16” or 1/4” in situations like major arm pins, so a small assortment of taps and dies can serve almost all needs. Most hardware stores carry rods in metal, aluminum, or brass. One rod will provide enough pins for many repairs.

Larger threading tools are available for threading large stock such as heavy torso pins in some models. The vise in Fig. 2 is tremendously helpful in such situations. Threading smaller pins can often be done with just Vise-Grips® or other locking pliers in lieu of the vise.

Fig. 3 illustrates two common sets of taps and dies, a Hanson® on the left and a kit from Sears on the right. The Hanson® was obtained from an Ace Hardware as a “home threading kit.” The drill chuck item is a tap wrench, useful for several tap sizes. The wrench on the bottom is shown holding a 1” die that was purchased singly.

In Fig. 4, the tapping for the new 4” pin from Fig. 2 is demonstrated. The tapping was dictated by the extraordinary length of the pin and predicted frictional forces involved. The repair lasted for several years.

Sleeves for pins are found on the female surfaces of many newer models. They are easily repaired with ordinary plastic tubing, but split tubing offers the advantage of flexible diameters. Marine stores carry “cable covers” in various diameters. Fig. 5a shows an installation of a sleeve, with comparison to an original sleeve in Fig. 5c. A 2” section allows plenty of grip to twist the tubing into the hole after gluing the end. Trimming the repair (Fig. 5b) is possible with a small fine-pointed scalpel or hobby knife (hardware, art stores; e.g. X-acto®). Using enough tubing to reach across the open space behind a sleeve can help to support the repair by preventing punching out of the sleeve from the front.
In Review - continued from page 24

**Power Tools** (Fig. 6)
Too much power can be damaging, but Dremel® and other small rotary tools are very useful for digging out pins and other piercing work. The Dremels® are available in different powers, but I have found that the 7.2 volt gives plenty of working time on one charge and enough power for most needs.

**Bolt Cutters** (Fig. 7)
These come in various sizes and are useful for quickly cutting soft rods like brass and even welding rods (1/8” or less, usually). Be sure to put a cloth over the cutting area or the cut piece might fly off. A light filing will remove any burrs from the end. A cup grinder on the Dremel® is excellent for the latter and leaves a nice rounded surface that will not cut. An emery board is good for final smoothing.

**Pliers** (Fig. 7)
Both normal and cutting pliers are useful, but small “miniature” needlenoses are particularly useful for digging out pins and getting into tight places. These can be found in small precision toolkits available even in drugstores.

**Quikclamps** (Fig. 7)
These are excellent for single-handed clamping while trying to steady materials with the other hand. Squeeze the small head release next to the rod, put either head against the work surface, slide the other in against the other side of the work, and squeeze the main trigger handle a few times until desired compression is attained.

Some of the newer quikclamps are reversible to act as stretchers, but the older examples have enough friction between the clamping head and the bar to act as light stretchers already.

**Bolt extractors** (Fig. 8)
These show much promise in nondestructive pin removal.
The extractors in Fig. 8 were purchased recently at Sears and include examples small enough to handle some old attachment pins. The set illustrated has its own drilling end for starting. After starting, flip the extractor around and use a reversed drill to back the pin out.

Hand drills can easily reverse movement and their gentleness is a big argument for their use. They are becoming hard to find, but many light-duty relatively inexpensive electric or battery-driven drills with variable speeds are readily available.

**Kronos® miniature tools—found at Radio Shack** (Fig. 9)
Kronos® makes three very useful miniature tool kits no larger than mechanical pencils that have proven excellent for various projects. The drills are especially useful. They come with a set of bits that store in the handle; hand twisting gives precise control when working with delicate parts. The files are useful if you do not have sandpaper, and the screwdrivers can handle almost any small screws, even on your glasses.
SUPPLIES

1. Sandpaper and emery boards in several grades are useful for smoothing pins, gentle reaming of openings, and rounding corners on plastics. Sharp edges on pins and plastic parts contribute to damage, while gently rounded ones can extend life considerably.

Dremel® kits have a concave grinding stone which does well for rough rounding of pins which are then smoothed with an emery board or fine files. The grinder can also be used in a small hand drill if a Dremel® is unavailable.

2. Renumbering supplies (Fig. 10) may be found at art and office supply stores. I find Hunt’s® crow quill pens and black India ink best for renumbering lighter colored parts. White India ink is also available for numbering darker body parts.

Crow quill pens can be tricky; always go in the normal direction of the nib because reversing can cause the pin to hang up and then spring free, showering the area with ink. Keep an alcohol wipe handy, but be careful—some model paints are alcohol-soluble. For quickly-done cleanup, even a paper towel will do.

Technical fountain pens, such as Koh-i-noor®, Mars®, or Staedtler®, are available in office and art supply stores or at their respective web sites. They come in various sizes from hairline to bold. They can overcome crow quill problems, except when using white ink.

Light scratching with a scribe and filling in with ink increased the permanence of very exposed markings. Lowe’s has a tungsten carbide scribe by Black and Decker® for just a couple of dollars.

New numbers can identify parts not identified on the original model, thus increasing the model’s usefulness.

3. Bondo® is useful for large repairs. It is readily available at auto parts and home improvement stores in both body repair and wood filler forms (both excellent). For large gaps, bridge with fiberglass cloth (wear gloves or itch!). Bondo® comes with a hardener, but there is much latitude allowed in mixing. With a little practice, desired drying time (from almost instant to hours) can be determined by varying the mix.

When filling large volumes, drill holes and place pins in the sides of the gap to reinforce the resin, which can be packed in around the pins in the general shape of the model part. Scalpels or grinders can be used for rough carving to match the part before finishing with sandpaper.

Acrylic paints, found at art stores, can be used to hide the repair. A little practice will enable mixing to match the shades of the parts.

4. Useful Adhesives include:
   a. Carpenter’s glue (Elmer’s®) are good for real bone; dental adhesives are good, too.
   b. Model airplane glue works with acrylics such as the Sta-co® cell models.
   c. Super glues are good for quick repairs, especially glues with 30-second drying times. Some super glues have been troublesome lately in furnishing permanent sleeve mounts, but Welder™ contact cement has been useful (see below).
   d. Epoxies of the double-syringe type are easiest to use; check package rating for use on plastic.
   e. Welder™ cement is a contact type which has given few disappointments.

When using adhesives, both sides of the break are given small amounts of glue and allowed to dry to tacky for 5-10 minutes, then the pieces are fitted together and they mate instantly, though holding together with light pressure helps to insure thorough infiltration of the glue. The curing takes overnight (24 hours is best). Be sure to press pieces together in the right position; a light pencil index mark before assembly is a useful aid.

The methods outlined above can remedy many problems in the anatomy laboratory and familiarization with them can result in many other lab problems being resolved. Shattered torso heads can be restored to usable condition, entire manikins can be brought back to life, and other scientific apparatus can be restored for other courses.

The information considered here should be useful not only to schools in which fulltime lab managers are available but also to others who have only work-study students or no help at all, to take care of the labs while repair activities fall to us. No previous knowledge of repair is necessary and maintenance of labs is limited only by one’s own imagination and willingness to try.

Look for case histories of Paul’s repairs in the Summer ’07 issue of HAPS-EDucator.

BIBLIOGRAPHY


♦
Summary of Workshop # 604-704
What Everyone Should Know
For Teaching Gastrointestinal Physiology

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Goodman began with modeling active learning on GI physiology in a large lecture setting by having participants work in groups to come up with questions about GI physiology. These questions were written on cards that were signed by each member of the group. During the mini-lecture, Goodman used three think-pair-share questions, one formative evaluation-style question, one discussion of a complicated figure, and one case study to engage the participants by calling on groups by name. In the think-pair-share format, the instructor poses a question, pairs of students think about the answer for a short period, then discuss and formulate an answer. The first think-pair-share was, “In 1822, at Fort Mackinac a young Canadian trapper was accidentally shot when a gun discharged about 3 feet from him, hitting him in the chest and abdomen. An American army surgeon, William Beaumont, cared for him for the next two years. The wound over the stomach failed to heal leaving an opening (fistula). Beaumont traded his care for the young man in exchange for being allowed to perform digestive experiments on the young man. What do you think he discovered about how the stomach works?” The second think-pair-share was, “What is the difference between digestion and metabolism? What is your evidence?” The third think-pair-share was, “What is lactose intolerance? Why is lactase usually found only in juvenile mammals? Is there a gene involved? What happens to someone who consumes milk products if that person is lactose intolerant? Why?” Goodman also used a personal story about a little girl who was born with her esophagus leading into her lungs.

The case study used was one on peptic ulcers from Silverthorn’s textbook with supplemental slides from the Federation of American Societies of Experimental Biology (FASEB) Breakthroughs in Bioscience article by Lynch. When a complicated slide was posted, Goodman stopped and asked the class what they saw in the slide and what the slide was designed to help them learn. This formative evaluation question was to find out if the participants understood the material. On an index card, participants were asked to write whether they now understood the lecture material they had previously not understood or whether they still had a question about the material. These cards were collected to be discussed and clarified, if necessary, in a subsequent class.

Following the mini-lecture, Goodman shared other resources and gave each workshop participant a CD containing all the resources presented:
1) Lecture handouts for human gastrointestinal physiology for undergraduate nursing students (Goodman)
2) PowerPoint™ slides with think, pair, share questions and case study (Goodman)
3) Laboratory activities in GI physiology (Goodman)
4) McMush challenge from American Physiological Society (APS) teacher (Entzminger)
5) Educational card games for understanding GI physiology (Odenweller)
6) Virtual rat: A tool for understanding hormonal regulation of GI function (Hsu)
7) Helicobacter pylori and Ulcers: a Paradigm Revised (Lynch)
8) Gastric secretion and its regulation (Weaver)
9) CFTR in cystic fibrosis and cholera: from membrane transport to clinical practice (Goodman)
10) APS/HAPS Archive of Teaching Resources

Goodman also distributed a list of GI diseases that can be used to help discuss and explain principles of pathophysiology for the GI system. The diseases of the GI tract with physiological implications include:
- Esophagus – achalasia, gastroesophageal reflux disease (GERD), diffuse esophageal spasm, nutcracker esophagus.
- Stomach – peptic ulcer, gastric mucosal atrophy, gastric bypass, pernicious anemia.
- Intestine – celiac sprue, cholera, lactose intolerance, Crohn’s disease, constipation/diarrhea, inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), glucose/galactose malabsorption syndrome.

Additional Resources
APS/HAPS Archives of Teaching Resources
http://www.apsarchive.org/Main/index.asp


Goodman BE. Learning object 380 at APS Archives of Teaching Resources.


**Summary of Workshop # 412-512**

**Designing a Student Guide for Meaningful Learning**

*Harold Modell*, presenter and summarizer

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This interactive workshop was attended by 15 people. Following introductions, attendees were divided into groups, asked to think of something that they had recently learned recently, then share with the group their learning process. The whole group then discussed what had transpired in the small groups. The learning tasks discussed ranged from learning new software, to buying a new house, to traveling and working in a third world country. The learning process, however, was the same. People had an initial idea (model) related to what they were going to learn, they tested that idea, and, on the basis of their experience testing the model, revised or reinforced their model. Meaningful learning (or learning with understanding) occurs when the information that is being acquired is used to accomplish a goal or solve a problem.

The elements of a guide that promotes meaningful learning were then discussed and examples of excerpts from a learning guide designed for a medical school physiology course (included in the workshop handout) were examined to illustrate incorporation of these elements into a document. To gain an appreciation for the student experience in a classroom application of a learning guide, the group then role-played as students who used an exercise dealing with acid-base balance.

The first step in creating a learning guide is to define performance goals for the topic. A performance goal is a statement telling the students what they should be able to do with the factual information and the models that they are building. This statement differs from the traditional set of learning objectives because the performance goal focuses more on the problem-solving process in which the information will be used. After discussing the purpose of the performance goal, attendees practiced writing such statements and presented their statements for discussion by the whole group.

The workshop assessment indicated that attendees gained new ideas about how to engage their students in active learning, and most thought that a bank of learning guide exercises aimed at the introductory physiology level would be useful in their teaching.
Background:

So, what is with the attitude? Before coming to Anne Arundel Community College, I worked for a number of years at the Gerontology Research Center of the National Institute on Aging, so I seemed to be the natural person to design a course on the biology of aging. But my area of research had been rather specific and was only tangentially related to gerontology, so I could not claim significant knowledge of the whole field. It was clear to me from the beginning that I would need to rely on some old friends—not “old” as in “geriatric” old friends but, rather, the kind I met in graduate school and at HAPS. Thus, calling upon Augie DiGiovanna, a friend from graduate school, and using his book (Human Aging: Biological Perspectives, McGraw-Hill), I was able to put together the basic format for a one-semester, comprehensive course on the biology of aging. The target population was to be allied health students who already had completed their basic science requirements, so that their backgrounds in Anatomy and Physiology could serve as the starting point for consideration of systemic changes attributable to the process of aging.

Of approximately 100 students trained in one of the allied health disciplines, guess how many actually have time in their schedules to take a three-credit course in gerontology. Right! None have, so I was asked by our Educational Policies and Curriculum Committee to revamp the course by eliminating the prerequisites to make it accessible to most students in the Gerontology Certificate Program (at the time, a new curriculum at Anne Arundel Community College). Picture teaching congestive heart failure to students who do not know about the heart and circulation of blood through the pulmonary and systemic circuits. Again, I called upon Augie and we agreed that, for a one-semester course, it would be necessary to teach A&P selectively, as it is needed for each module of the course, covering age-related changes to each of the body systems as they are encountered. Simple. Augie says it can be done, so it shall be done.

The first time I taught the course was the spring of 2003, I was President of HAPS, and the HAPS Annual Conference in Philadelphia was coming up, so I was pleased as punch to be test driving a new course as an overload! The course was offered for the first time to an enrollment of eight students—piece of cake, right? Some of those students were quite good, and one was actually a practicing nurse. Unfortunately, he also was exhausted for most of the evening classes, or perhaps he suffered from narcolepsy, so he did not do quite as well as I had expected he would. Nonetheless, we got through that first run of the course and, in the process, at least some students learned a bit about the biology of aging and I had learned a bit more about how to do what I had somewhat unwittingly agreed to do.

The course ran two semesters in the classroom, and I continued to be quite pleasantly surprised at the general level of interest and academic capabilities I found in the students; but it was becoming clearer and clearer that, if the course were going to serve both the students and me (it is still an overload in my schedule) it should be offered online.

The plunge?

Well, not quite a plunge, it was more like dabbling one’s toes in the water to test the temperature. The first time the course was crushed into electrons for dissemination to eager students everywhere, my squeamishness compelled me to do it in a “blended” (nee “hybrid”) format. The class met on campus for three sessions throughout the semester, while all material and quizzes were offered and taken online. Overall, this worked well though one of the twenty enrollees withdrew because she “was not suited for online class work.” Seven others failed to complete the course, either withdrawing due to poor performance or for other, unspecified reasons. The 12 students who did finish the course gave the course, and me, high marks on the end-of-semester evaluations.

Now, The Real Plunge!

During the spring semester of 2005, Biology of Aging was offered totally online. I found the students highly capable and some had had advanced training (nursing and physical therapy were two represented fields). These undergraduates eagerly became involved in internet research, shared their findings with others using the Discussion Board (of WebCT™), and commiserated about their own problems with aging processes that they were experiencing in themselves or in others close to them. The Discussion Board, serving as our virtual classroom, was used in a way I found reminiscent of graduate seminars. Students did the library (internet) research, led discussions, and applied their research findings to personal experiences. The students usually seemed to be enjoying the process; and I enjoyed eavesdropping on their discussions, chiming in only when I was asked to do so or when I simply could not resist. Retention this time was similar to that experienced with the hybrid presentation. Twenty began the semester, 18 made it through the initial week, 9 earned grades, and 1 has an outstanding Incomplete due to work missed.
**In Review - continued from page 29**

**Lingering Concerns**

1. A number of students continue to enroll in the online course with expectations of convenience, easy credit, and high grades. Thus, it is no surprise that the attrition rates remain high (about 39% overall), but that does not bother me as much as perhaps it should.

2. I miss face-to-face involvement with students. Not seeing them leaves me less aware than I would like to be of their possible handicapping conditions, their varying levels of academic maturity, and their commitment to learning the biology of aging.

3. I had to work very hard to compensate for the students’ lack of fundamental knowledge of A&P. I felt, for example, that essay exams were necessary both to help me develop a better feel for each student’s capabilities and to avoid focusing on the details of A&P in the way that multiple choice questions often do.

**Epilogue**

How is the attitude now? It is better, thank you. And I owe that to one of the attendees at this workshop who offered to help me revamp the course in order to make it more efficient and easier for students to navigate. Not wishing to embarrass this particular individual, I shall identify him only by the initials T.L.* (He lives in Florida, he has been a valued member of HAPS for many years, and he has a lot of online teaching experience.) I am most grateful to this masked avenger of online gremlins, and I am looking forward to sharing this year’s experiences in online teaching in a follow-up workshop next year. I hope that, with the improvements suggested by T.L. in place, my attitude will have improved even more. See you in San Diego where, no doubt, interaction with my colleagues in HAPS will help me take another step toward become a better teacher!

* Tom Lancraft

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**Some of the Coolest Stuff on www.hapsweb.org**

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If you have not checked out the HAPS website recently, you are missing out on a lot. Carl Shuster and the team are constantly posting new pieces that help make HAPS the vibrant organization that we all love.

The website is the first place to go if you are wondering about meetings and conferences. The San Diego 2007 conference is coming fast, and we have links to tons of great information available to help you prepare for a fantastic time. There is also information about regional conferences, if you are looking for something closer to home.

Career opportunities abound, with colleges and universities posting offerings on our website. It is becoming more and more a must-see location if you are looking for a change of pace from your current location.

“In the News” updating you on current events, in case you are too busy grading papers and giving lectures to catch the latest and greatest things going on in our field.

Our committees are doing a great job of creating supplemental materials for you, such as the Lab Safety Protocols and Cadaver Lab Setup. Check out the web if you are curious about what committees exist and how you can get involved.

My HAPS.Store is a great way to make purchases online, with a little financial assistance going back to HAPS for helping you find just the right place to shop.

The Web Site Committee will be asking for your help in making the website even more useful and accessible while at the 2007 Annual Conference in San Diego. It is already a great website, but we are not resting on our laurels; we want to be even better than you can imagine.

You have a few minutes, check it out. It is incredible!
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**HAPS-EDucator’s EDU-Snippets** needs you.

- Have your teaching tips published
- Short, just a few sentences or paragraphs
- Share your success in the class with others
- Network regarding ideas from your class

To be included in the **EDU-Snippets** column please send me any clever, different, interesting, usable examples of ways you verify for yourself that your students are "getting it" in your classes or a clever way to present a topic. These are the shorter quicker ways that we find out if they are "getting it" on a day to day basis. I know you are all doing something good that can be shared with colleagues. We need your description of what you do with your name, school and email address. We want to include your thoughts in the **HAPS-EDucator** in an article describing these techniques. You probably noticed the absence of **EDU-Snippets** in this issue. To prevent this from happening again, please send your valuable, short teaching tips. You can send them to me anytime.

Thanks,

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Coordinates the pursuit of common goals, information exchange, and sharing of resources between HAPS and other professional societies.

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