HAPS News is the official newsletter of the Human Anatomy and Physiology Society (HAPS) and is published quarterly. 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.

Membership has increased steadily since the formation of HAPS in 1989, and there are presently 868 members from across the United States and Canada. Annual membership dues are $20 for an individual membership and $100 for a corporate membership. HAPS welcomes both individual and corporate memberships applications and inquiries.

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Papers for publication, requests for information, positions available and wanted, and letters to the editor are welcomed. Send a double-spaced typed or printed copy together with your name, position, address, phone number, and institutional affiliation to the editor.

HAPS News is created in Aldus Pagemaker 4.0 on a Macintosh Classic computer. Files can be imported into PageMaker from Microsoft Word or MacWrite word processing programs. Your editor greatly appreciates receiving files on 3.5" double density disks. Please include a hard copy, just in case the disk is damaged en route or during transfer to my program. Upon request, disks will be returned to each author after publication of the information. Please identify your software and hardware when submitting information on computer disks.

DEADLINES FOR SUBMITTING MATERIAL TO HAPS News: Sept. 10 (Nov. issue); Dec. 10 (Feb. issue); March 10 (May issue); June 10 (August issue).
Outstanding! The 6th Annual Conference and Workshops just held in San Diego continued our tradition of providing a variety of stimulating and informative activities for HAPS participants. While the skies over San Diego displayed the “June gloom” typical of that time of year, the attitude of the participants was anything but gloomy. The speakers were interesting, informative, and thought-provoking; and the wide range of workshops gave many of us a chance to hone our skills in decision-making. And let’s not forget the Globe Theater, the Wild Animal Park, the San Diego Zoo, Sea World, and the other attractions of San Diego! Over 200 members were in attendance, including a large number of new members. If you were unable to attend, keep your eyes on HAPS News for summaries of the seminars and workshops. Perhaps you can join us next year in Beaumont, Texas at the 1993 conference.

In addition to Conference Coordinator Shirley Mulcahy, three other members were acknowledged at the Annual Banquet for their significant contributions to HAPS. Lew Milner was recognized for his critical efforts as the original secretary-treasurer for HAPS, a role that he played both before and after our official formation as a society. Even though Lew’s duties at present are more administrative than instructional, he is still an enthusiastic member of HAPS. Thanks, Lew!

Sandra Grabowski was recognized for her efforts in nurturing HAPS News over the past two years. Under her guidance HAPS News has become an attractive and efficient means of communication for HAPS members. She served as editor this past year despite being in the midst of her collaboration on the seventh edition of Tortora’s Principles of Anatomy and Physiology. (For those of you who haven’t heard the latest, Sandy is the new co-author of the Tortora textbook.) Thanks, Sandy!

Also recognized was Virginia Rivers for her leadership role this past year as president of HAPS. We are a new organization facing some interesting questions and decisions, and she has guided us steadily for the past year. Thanks, Virginia, and don’t leave town I might need you! And, while I’m on the subject, I would like to express my appreciation to Richard Welton, an amazingly prolific communicator, and member-at-large Larry Hibbert who spearheaded our process of incorporation and tax-exempt status with the IRS. Welcome to new members-at-large Karen Lafleur and Shirley Mulcahy and to president-elect Sandra Grabowski, and thanks to the other candidates for their willingness to serve on the Executive Board. Thanks, also to all the committee chairs and committee members for their efforts to further our goals. A special welcome to our new newsletter editor, Theresa Page. Sandy is a tough act to follow, Theresa, but having spent some time with you in San Diego I have no doubt that you will do an excellent job. Finally I would like to thank all of our corporate members. These organizations and the excellent people that represent them have always been, and continue to be, a real strength to HAPS.

A number of ongoing HAPS activities will continue as we begin a new year. For example, increasing member involvement in HAPS activities and striving to improve service to its members are major goals of the Executive Board. We hope to have more regional workshops to serve the needs of those members who are unable to attend the annual conference and workshops. If you would like to volunteer as a regional conference coordinator, HAPS will provide information and financial assistance. Bob Anthony (Triton College, River Grove, IL 60717) has agreed to serve as our contact person for this effort.

HAPS will continue to maintain contact with the American Physiological Society (APS) and will be open to collaborative efforts that could serve both our memberships. While the two organizations definitely have different primary goals and memberships, we have goals in common that permit joint efforts on projects of interest to both groups.

Several new initiatives are being undertaken this year. To gain new members for HAPS, I have assigned specific individuals to each state to serve as our eyes and ears for information about meetings and gatherings where we might spread the word about our organization to others who teach anatomy and physiology. Member-at-large Jane Salisbury will function as the contact person for this endeavor. We hope this will be a cost-effective method to get HAPS information out to the right audience.

Mildred Galliher ( Cochise College, Douglas, AZ 85607) suggested that establishment of an electronic bulletin board would be a great way for HAPS members, as well as non-members, to get information about upcoming HAPS activities. The Executive Board asked Mildred to begin working on implementation of this idea. The Executive Board also approved, in principle, the establishment of a HAPS toll-free 800 number. Communication and exchange of information among HAPS members should be much easier in the future with these new access routes.

All in all, it looks to be an exciting year for HAPS. The society is growing at a manageable rate and is in a strong financial position. The essence of HAPS is, of course, its members. I hope that you find your membership in HAPS to be useful and rewarding. I also hope that you can help further the goals of HAPS through your input and your output. I would encourage each of you to consider writing an article, whatever the length, for the newsletter. Share with other HAPS members the things that excite or motivate your students or you. Tell us what works or doesn’t work for you. Every teacher in this group has something helpful to offer other HAPS members. Individually, we are good teachers, but collectively we can be even better if we network and profit from our collective knowledge. Let’s make the fourth year of HAPS a great one!

Gary Johnson, HAPS president
Madison Area Technical College
Madison, WI 53704

Offered are being accepted for the 1994 conference site. If your institution could host a week-long conference and workshops, please call Virginia Rivers at (702) 746-0105.

HAPS News August 1992 page 3
CORE CURRICULUM COMMITTEE REPORT

The 1992 HAPS Conference in San Diego provided an excellent opportunity for the Core Curriculum Committee to continue to define the parameters of an introductory college level experience in human anatomy and physiology. Five workshops, open to all conference participants, were each led by a member of the core curriculum committee. Participants at each of the workshops were invited to respond to sections of the proposed core curriculum already written by the committee. Each workshop focused on specific anatomy and physiology topics, and participants were given the task of rewriting that portion of the content section. Approximately 50 persons participated in the five workshops and provided excellent input to the committee.

Based on input received at the San Diego conference, the core curriculum document is again being rewritten. The revised document will be organized as follows:

(a) intent, (b) rationale and position statements, (c) credits and hours, (d) course description, (e) pre-requisites, and (f) content. The committee plans to present a final product to the HAPS Executive Board by August 1992. If the Executive Board approves the document, it should be available for distribution by October 1992. A copy of the approved document may be mailed to all HAPS members if printing and mailing costs seem reasonable. An alternative plan is to announce availability of the approved document in a future HAPS newsletter and to mail copies to those who request them. Watch your future newsletters!

The Core Curriculum Committee will remain as a standing committee and will periodically review and update the final, approved document. The committee will also recommend to the HAPS Executive Board that a testing committee be established to coordinate efforts in development of a HAPS-endorsed pre-test/post-test for anatomy and physiology. If you would like to serve on the testing committee, contact Gary Johnson, HAPS president.

The Core Curriculum Committee consists of the following members:
John H. Dustman, Indiana Univ. NW, Indiana; Ric Martini, Maui Community College, Hawaii; Henry Ruschin, Humber College, Toronto, Ontario, Canada; David Smith, San Antonio College, Texas; Arlene Wolff, Fox Valley Technical College, Wisconsin. Alternates are: Donald S. Kisel, Suffolk County Community College, New York; John Gwinn, Univ. of Akron, Ohio.

reported by
Victor Johnson, chair
Core Curriculum Committee
Madison Area Technical College,
Madison, WI 53704

MINUTES OF THE ANNUAL MEETING

Shirley Mulcahy, director of the 1992 conference, welcomed participants, made announcements and introduced Yvonne Bergland, Dean of the School of Mathematics and Social and Natural Sciences at San Diego Mesa College. Dean Bergland officially welcomed the conference participants on behalf of San Diego Mesa College. HAPS president Virginia Rivers introduced the symposia speakers.

HAPS annual business meeting was opened and the treasurer's report which covered the period from May 25, 1991 to May 31, 1992 was presented by Sandy Uyeshiro, secretary-treasurer. Income for the period was $16,591.16 with a forwarding balance of $6,279.08. Expenses totaled $7,888.68 and the ending balance was $14,981.56. A motion was made to accept the treasurer's report and it was seconded and passed.

John Dustman, chair of the Membership Committee, presented the membership report. John reported that HAPS membership is growing at a fairly steady rate, but he plans to place advertisements in appropriate journals to solicit additional members from among that group of anatomy and physiology teachers who may not know about HAPS.

Larry Hibbert, member-at-large of the Executive Board, briefly discussed the procedure for obtaining nonprofit status from the Internal Revenue Service. To fulfill the requirements for incorporation, an amendment was needed to the existing HAPS Articles of Incorporation. The exact wording of the proposed amendment was read by Larry. John Dustman made the motion that the amended Articles of Incorporation of the Corporation be adopted. Said motion for adoption was seconded by James Love. After a majority vote on the motion, the Amended Articles of Incorporation of the Corporation were adopted. It was further resolved that officers and directors of HAPS be instructed to complete the necessary documentation for incorporation.

Steve Trautwein, chair of the Corporate Members Committee, described what constitutes a corporate member and passed out a list of corporate members.

Vic Johnson, chair of the Core Curriculum Committee, explained the origins of the committee and announced that five workshops were scheduled during the conference to obtain feedback on the proposed document.

Norman Staub, past president of the American Physiological Society (APS), discussed his organization's interest in encouraging greater collaboration between APS and HAPS. The education segment of APS specifically wants to work with HAPS and has delegated one of its member to serve as liaison. Beginning in 1993, APS is setting up a separate office for education which is being staffed with a full time employee. APS wants to improve its education journal, Advances in Physiology Education, and has appointed Penny Hansen as the new editor of the journal.

(Continued on page 5)
John Clevery spoke on the availability of fellowships from the National Science Foundation (NSF). He announced that he would be conducting a grant proposal writing seminar at the Conference. He explained that most NSF money goes to fund research, but the Education and Human Resources Division funds education projects.


Brief announcements were made by Gary Johnson, Shirley Mulcahy, and Joyce Costello, and the meeting was officially adjourned.

submitted by
Sandra A Uyeshiro
HAPS secretary-treasurer
Modesto Junior College
Modesto, CA 95350

Do you use cats as a dissection animal in anatomy and physiology? If you do, it's possible that the new pet protection regulations will affect the availability and cost of acquiring specimens. Elizabeth Coolidge-Stolz, of D.C. Heath and Company Publishers would like to talk to any instructors of anatomy and physiology who know about the regulations and feel that it might change the direction of animal use, and thus, the focus of laboratory manuals.

If you have information or opinions about this, please call Ms. Coolidge-Stolz at D.C. Heath on their toll-free number: (800) 235-3565, extension 1153, (8:30 to 5:00 EST).

EDITOR'S NOTE: A flyer from one of the major supply houses just arrived in my box with the announcement that an industry-wide shortage of cats is in effect. But, you order early your chances of purchasing them improve significantly since this company is filling orders for "good" customers first.

TO SLEEP, PERCHANCE . . .

One of our lingering unknowns is the molecular triggers that regulate the sleep-wake cycle. In a recent FASEB Journal (1991, 5:2575-2581), Osamu Hayaishi reviews the "Molecular mechanisms of sleep-wake regulation: roles of prostaglandins D₂ and E₃." He concludes that these two eicosanoids are complementary endogenous regulators: PGD₂ induces physiological sleep and PGE₂ stimulates wakefulness. When PGD₂ is infused into the third ventricle of the brain of cats and rodents, the total time spent in both slow wave sleep and rapid eye movement sleep increases by as much as 50%. The activity of PGD synthetase, an enzyme in the biosynthetic pathway for PGDs, varies with the sleep cycle of rats, being highest during the day when sleep normally occurs. Further, selenium chloride, a specific inhibitor of PGD synthetase, reduces sleep time in a dose-dependent manner.

In contrast, PGE₂ increases awake time in rats, while an antagonist of PGE₂, the drug AH6809, completely abolishes the ability of PGE₂ to wake the animals. In one interesting experiment PGE₂ was tested in narcoleptic dogs, which show brief, rapid-onset episodes of sleep, usually triggered by excitement. Dogs were fed moist food, which excited them, so they fell asleep. They awoke to continue eating, got excited again, and, well, you get the idea. When PGE₂, or its more permeable methyl ester were injected into the brains of the dogs, both the number of narcoleptic episodes and the duration of the episodes decreased.

Hayaishi proposes that, although many factors are undoubtedly involved, PGD₂ and PGE₂ are the major endogenous regulators of the sleep-wake cycle, promoting sleep and wakefulness, respectively. The two prostaglandins probably act on the sleep-wake centers in the preoptic area and posterior hypothalamus, as supported by the distribution of receptors and synthetic enzymes in the brain.

CLASS CONDITIONING AND FRUIT FLY GENETICS

Drosophilia might be a great model for the genetics of learning—but flies are incredibly stupid. To get around this hurdle, Tim Tully of Cold Spring Harbor Laboratory has invented a computerized machine that trains large swarms of flies at a time, avoiding the tedious labor previously required. Tully's research team hopes to use several known mutants with defects in learning to identify and determine the functions of specific genes involved in learning. (Stipp, D. 1991. Grand Gamble on Fruit Fly Learning. Science 253:1486-1487.)

MAPPING MEMORY IN THE TEMPORAL LOBE

How and where learning occurs and memory is stored has been illuminated by studies of humans with damage to particular regions of the cerebral cortex. Perhaps the most famous is patient H.M., who could not store new memories following surgical resection of his medial temporal lobe to alleviate epilepsy. He had intact short-term memory and retained previous permanent memories, but new information could not be transferred from the temporal lobe into the neocortex. More recent studies with monkeys have revealed that the hippocampus and connected structures form the medial temporal lobe memory system. This system establishes long-term declarative memory (recall of facts) and plays a role in the reorganization of the memory into independent, permanent storage in the neocortex. This transfer of function insures that the hippocampal system remains free to acquire new information. Non-declarative memory (skill learning, not accessible to the conscious mind and therefore not affected by amnesia) lies elsewhere in the brain.


submitted by
Wayne W. Carley, Ph.D.
Lamar University
Beaumont, TX 77710

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SOFTWARE TUTORIALS,
HOW GOOD ARE THEY?

My own experience with the recent collection of software tutorials began when I learned that I was to be the new HAPS editor. One of Sandy Grabowski's first questions was, "What kind of word processor do you use?" During our discussion of how the newsletter was constructed, it became apparent that I must learn Microsoft Word. Later, I decided to produce the newsletter using PageMaker since I had heard such positive things about the program.

My first inkling that this might be a more difficult undertaking than I had originally anticipated occurred as I sat in front of a bewildering array of menus in PageMaker and realized that help was needed and the sooner the better. Upon arriving home after spending a frustrating day trying to learn Microsoft Word and PageMaker on my own and WITHOUT MANUALS, the latest issue of a popular software catalog was in my mailbox. While perusing it, I came across an advertisement for tutorials and realized that my redemption was at hand. I grabbed my credit card, ran to the phone, and immediately placed an order for the PageMaker tutorials by Personal Training Systems. Two days later I was sitting in front of the computer with earphones in place, being led step-by-step through the program.

But how good are the tutorials? I found the PageMaker tutorials remarkably easy to use. Instructions are clear, logical, and easy to follow. They are definitely hands-on since the user performs the techniques on a practice disk along with the real PageMaker program. In addition the tape can be stopped, rewound, and replayed at any time that a step is not understood. Practice lessons are provided, and a summary card is included, which is very helpful when you move on to setting up an actual file in PageMaker. It takes about 90 minutes to complete the tutorial.

Cost is always a major consideration when purchasing software, and tutorials are not cheap. I paid $59 for one 90 minute tutorial, but you may pay more if you buy from a source other than the one I used. Do I consider the $59 well spent? The answer is a resounding YES! The tutorial is the closest you can get to having your own personal teacher talking you through each technique. For anyone who is not a computer expert, and I am not, the tutorial is the fastest and least painful way to learn a new program. In fact I am so impressed with the PageMaker tutorials that I have just ordered the tutorials for Microsoft Word.

submitted by
Theresa Page
Texas Woman's University
Denton, Texas 76204

Update Workshops

From the 1992 HAPS conference at San Diego, California

presented by
Michael A. Kolitsky, Ph.D., Director
Optical Data Design Center
California Lutheran University
Thousand Oaks, CA 91360

There are two available videodisc formats: CAV (constant angular velocity) and CLV (constant linear velocity). Constant linear velocity discs (also called extended play) are embossed with one continuous spiral groove of analog information. They cannot display single images well and are used primarily for distribution of consumer-grade Laservision® movies. Constant angular velocity discs, used for individual or institutional distribution, have 54000 concentric grooves enabling the display of 54000 still images or short motion segments.

There are probably more commercially-prepared videodisc titles available in the biological sciences than any other scientific field at this time. Nonetheless, a faculty member may wish to produce customized videodiscs for use with Hypermedia or other computer programs. The first step in this process involves collection and preparation of the images as 35 mm slides. Movies shot in 16 mm format are also suitable, if available. Permission from the copyright holder must be obtained if the material is not original. Next, the images must be transferred to a 1" or 3/4" videotape premaster. Unless the faculty member's institution has this capability, the cost for professional transfer may be as much as $1/ slide or $100/hour for film, provided there is no special handling or editing required.

(Reporter's note: Some videodisc mastering (continued on page 7)
firms will accept a 1/2" S-VHS premaster, but the quality of the final tape is inferior to the 1" or 3/4" tape.) This stage of the process may cost as little as a few hundred dollars if done "in house" or thousands of dollars if a video post-production company is hired to transfer a large number of individual images to 1" tape.

For mass production major videodisc manufacturers prepare a "glassmaster" from the videotape premaster for approximately $2000. Multiple copies can then be produced for about $12-15 each. But if you’re not in a hurry, smaller companies such as Optical Disc Corp. (800-350-3500) and Discronics (714-630-6700), both in California, will produce a single videodisc from a tape premaster for $300, with additional identical copies made at the same time for $100 each.

If frequent production of videodiscs is anticipated, another option is to purchase a videodisc recording deck that uses videodisc cartridges. These devices, dubbed WORM (write once read many times), currently cost around $16500. Each videodisc cartridge costs about $300. If the cost of the recorder can be shared with other departments and numerous discs are produced, the machine will quickly repay the initial investment through elimination of the premastering costs. Write once read many times or WORM format videodisc players are available for less than $5000. However, the WORM recorder or player will not load, play, or record CAV or CLV videodiscs.

reported by
Stephen Langjahr, Ph. D.
Antelope Valley College
Lancaster, CA 93536

STUDENT DIAGNOSIS:
WORD LEARNERS VS.
PICTURE LEARNERS

presented by
Charles Daniels
Kapiolani Community College,
Honolulu, Hawaii 96816

The session gave an overview of tests and research conducted by Dr. Daniels. A comparison of test results by area of specialty on visual learning versus verbal learning showed that chemists, physicists and biologists are usually visual learners whereas sociologists and psychologists tend to be verbal learners. Visualizers are denoted as having the ability to mentally construct visual images and to implement this method when learning new material. Verbal learners perform better when memorizing lists of words or data.

A comparison of the efficacy of three test measurements — Verbalizer-Visualizer Questionnaire (VVG), Gordon Test and Imagery Control (GTC), and Vividness of Visual Imagery (VVIQ)—on identifying visual and verbal learners was discussed. Daniels believes that the GTIC correlates highly with the intelligence quotient (IQ) and with the scores obtained on final exams. The results of his study suggest that teachers need to include both visual and verbal type questions on exams in order to reach both groups of learners.

reported by
Marion Cornelius, Ph.D.
Casa Grande, AZ 85222

TEACHING TIPS

CRITICAL THINKING EXERCISE IN CROSS-SECTIONAL ANATOMY

I attended a National Science Foundation (NSF) short course for college teachers last year. A workshop entitled "Critical Thinking in Science" was presented by Robert Allen and David Sroup. They illustrated a testing technique in which a student is asked to select one of five answers on a multiple choice question and is then required to justify that choice by writing a paragraph describing it.

I tried this in my anatomy and physiology classes by assigning critical thinking exercises in some of the units but not in others. I concluded that students spent more time thinking about the concepts and performed better on tests when this technique was used.

submitted by John E. Stencel
Olney Central College
Olney, IL 62450

A COOPERATIVE APPROACH TO LEARNING

I utilize several techniques to involve students in a cooperative approach to learning in the classroom. Cooperative learning is important because it is the approach that is most valued in the workplace. Problem-solving usually occurs in a group and involves the following skills which the student must demonstrate upon assuming a position in a given profession: (1) listening to the views of others, (2) offering suggestions which may lead to an appropriate answer, and (3) providing a rationale for selecting a given solution to the problem.

Techniques:
1. Two students work together to answer questions on a lecture exam.
2. After a particularly complex concept is presented in class, students are divided into groups of two or three and asked to answer questions which are designed to reinforce specific lecture objectives.
3. Tables are arranged in a square or circle with the instructor in the center. Students are divided into groups and must stand behind a table. The instructor moves from one group to the next asking questions. Students may confer prior to answering. If the answer is correct, both members of the group sit down. If the answer is incorrect, the students remain standing. The goal is to finish the quiz session with all students sitting.

submitted by Bob Anthony
Triton College
River Grove, IL 60171

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UPDATE SYMPOSIUM
FROM THE 1992 HAPS CONFERENCE AT SAN DIEGO, CALIFORNIA

NUMBER ONE IN MATH AND SCIENCE BY THE YEAR 2000: THE MYTHS AND THE REALITIES

presented by
Paul Saltman, Ph.D.
Department of Biology
University of California, San Diego

The year is 1992 and the United States ranks 18th in the world in math and science literacy. By 6th grade, with an average of 20 minutes a week of science education during the elementary school years, 70 percent of all American children are “turned off” to science and math. By the end of high school the figure is 90 percent. Just 2 percent of the college graduates in America have degrees in science, math, or engineering. The myth is that the U.S. can be anywhere near “Number One” by the year 2000. The reality is that the U.S. is in danger of “going down the intellectual toilet.”

Why do we need scientific literacy? Dr. Saltman argues that it is not merely to effectively compete in world markets or to provide defenses for our country. Rather, he opines that a democracy cannot exist without a citizenry that is literate in science and math. Such literacy is needed to understand the technological and scientific basis for problems that beset our world and to make decisions on the allocation of human, social, and fiscal resources that will optimize our individual and collective human potential.

Although it was a Monday morning, the fervor and passion of Dr. Saltman’s inspirational talk evoked images of an evangelical meeting. After defining science literacy, he provided insights into why science literacy is so lacking in the U.S. and a brief description of his approach to attacking the problem.

Levels of Science Literacy
According to Saltman, there are several levels to reaching the “nirvana” of science literacy, and we as teachers need to be role models for our students, our colleagues, and ourselves.

Level 1: knowing facts (or where to look for them). Why is the sky blue, grass green, and hemoglobin red?
Level 2: acquiring requisite skills, such as how to measure time, how to communicate, how to use a pipette, and learning how to analyze data.
Level 3: understanding the epistemology of science. How do we know what we know about science? How do we know the grass is green?
Level 4: applying scientific knowledge to maximize human potential, individual and collective. Each of us is the product of our own genetic potential, molded by the impact of our environments and by inputs from our five senses.
Level 5: developing a sense of curiosity that leads to creative discovery and insight. “The best learning machine is a great teacher,” one who helps students discover the wonder of science and math.

Why Is Science Literacy Lacking?
Saltman makes the case that from elementary school onward, nobody cares about science and math teaching. Nationwide, only four percent of elementary school teachers have had one year of college science. High school teachers are poorly trained, have inadequate equipment, and lack financial resources. At most colleges and universities, good teaching is not encouraged and rewarded (despite lip-service to the contrary). The result is a year-by-year dwindling of the numbers of students who can discover the love of knowledge in the realm of science and math.

The Saltman Solutions
What can we do about the dismal proportions of citizens who are illiterate in science and math? We can win. Each of us can find ways to promote science literacy. An important approach is to find ways to reward fine teachers and fine students. Good teaching can be measured and can be recognized. When it is rewarded, it will get better. Another approach is to stimulate our own students to appreciate the relevance of anatomy and physiology to the rest of the world around them: the social sciences, environmental issues, arts, politics, and yes, even sports.

Saltman’s personal contribution over the past five years has been to raise the science literacy of elementary school teachers in the San Diego community. He obtained funding for a three-year summer program at UCSD to teach biology, chemistry, physics, earth sciences, astronomy, oceanography, and meteorology. How can one entice elementary school teachers to want to learn science? Pay them for coming and recruit the best faculty to teach them. Make them feel they are “on a holy mission to educate science in the universe.” In the UCSD program, hands-on experiments were featured every afternoon to reinforce the concepts taught in the morning. By the end of the program, each participant had a six-foot long shelf of experiments, suitable for elementary school students, using inexpensive materials that could be bought at the supermarket or drug store. The “hard core” of teachers in the UCSD program now teach about 60 minutes of science a day and act as in-service educators for other teachers in their school district. The UCSD faculty are “on-call” to serve as a backup resource for these teachers to reinforce the programs they develop.

Saltman convincingly argued that the prime issue in raising science and math literacy in our society is teaching. “Unless there is a good teacher as a human model standing in front of a classroom, K through post-doc, nothing is going to change.” That is the responsibility each of us faces.

reported by
Sandra K. Grabowski, Ph.D.
Dept. of Biological Sciences
Purdue University
W. Lafayette, IN 47907-1392
HAPS MEMBERSHIP INFORMATION

The Human Anatomy and Physiology Society was formed in 1989 by teachers of anatomy and physiology from across the United States and Canada. Its goals are:

- promote and facilitate communication and collaboration among teachers of human anatomy and physiology in colleges, universities, and related institutions;
- promote and organize professional development programs for the teaching of human anatomy and physiology in colleges, universities, and related institutions;
- provide members with information about the latest development in the health and science fields.
- facilitate communication with other sectors of the community;
- collect and disseminate information to the members regarding events of interest in other related organizations; and
- encourage educational research and publication by human anatomy and physiology teachers.

To further improve communication among its members, HAPS is developing an electronic bulletin board and acquiring an 800 number.

MEMBERSHIP BENEFITS:

- Receive a reduced registration rate at the annual conference.
- Receive the HAPS News, a quarterly newsletter that summarizes conference updates and provides other information useful to teachers of human anatomy and physiology. Members are strongly encouraged to submit articles to the newsletter.
- Network with over 800 human anatomy and physiology educators across the country.
- Participate in an organization that exclusively addresses the needs and interests of human anatomy and physiology teachers.

If you would like to join a supportive and enthusiastic group of teachers who share your interests and concerns, please complete the attached membership form and mail it along with a check or money order for $20 (made payable to the Human Anatomy and Physiology Society) to:

John Dustman, Ph. D., Chair
HAPS MEMBERSHIP COMMITTEE
Indiana University NW
3400 Broadway
Gary, IN 46408

(Continued on back)

Cut along this line and return the bottom portion to HAPS

MEMBERSHIP (Check One)  Office use only:
O NEW  MEMBERSHIP BEGINNING DATE
O RENEWAL  MEMBERSHIP EXPIRATION DATE
O CHANGE OF ADDRESS

NAME  Last  First  Middle

INSTITUTION: NAME

ADDRESS  DEPT

RANK

PHONE

HOME ADDRESS:  PHONE

FAX

NEWSLETTER MAILING ADDRESS (if different from institutional address) The newsletter is automatically sent to your institutional address unless you indicate otherwise.

Please complete the member interest survey shown on the back of this form.
HAPS
HISTORICAL PERSPECTIVE

The idea of a national organization for human anatomy and physiology instructors surfaced during the first NATIONAL ANATOMY AND PHYSIOLOGY WORKSHOP held at Triton College in Chicago, Illinois in 1987. In 1988 participants from twenty-five states and Canada attended the second Anatomy and Physiology Workshop at Triton College. At that conference an organizational meeting was held to explore various options for forming an HUMAN ANATOMY AND PHYSIOLOGY SOCIETY. Formation of the official HUMAN ANATOMY AND PHYSIOLOGY SOCIETY (HAPS) occurred at the third Human Anatomy and Physiology Workshop held in Reno, Nevada, in 1989 with ratification of a constitution and election of the first HAPS officers. HAPS sponsors a national conference and workshop where anatomy and physiology teachers can attend update seminars on various topics and workshops involving teaching materials and techniques. The Society also assists members in organizing and presenting regional meetings. HAPS national conferences have been held yearly since 1989:

1990-Madison Area Technical College; Madison, Wisconsin
1991-Greenville Technical College; Greenville, South Carolina
1992-San Diego Mesa College; San Diego, California.

1993-May 23-27 at Lamar University; Beaumont, TX
For information contact: Wayne Carley, Ph.D.
Department of Biology
Lamar University
Beaumont, TX 77710-0037
(409) 880-8260

MEMBER INTEREST SURVEY

To assist the Society in meeting the needs of its members, please complete the survey form shown below. Please check each area in which you have developed a particular expertise. Expertise can be defined for example as acquiring reading or applied knowledge in a given area, implementation of a technique or concept in a human anatomy and physiology course, or writing successful grants. Your participation in HAPS is greatly appreciated.

O Use of Cadavers O Physical facilities design O Computerized library searches

O Electronics in the lab O Museum displays O Computerized data acquisition systems

O Lecture testing methods O Grants O Videoimage acquisition systems

O Lab testing methods O Leadership skills O Instructor/course evaluation techniques

O Implementing computers in the class room O Laboratory safety O Gradebook programs

O Disabled students or students with learning disabilities in the classroom O Team teaching

O Management/administrative skills O Writing articles/textbooks

O Radiosotope or other specialized chemical use in the laboratory

Other areas (please specify):
A NOTE OF FAREWELL
FROM SANDRA
GRABOWSKI,
OUTGOING HAPS News
EDITOR

During the past two years, as editor of HAPS News, I've tried to create a newsletter that would keep HAPS members informed and in touch with one another and provide a forum for sharing problems and solutions. An allied goal was to help us build an identity as an organization that seeks to enhance the art of teaching. The effort has succeeded in large measure because so many of you have contributed articles. Our newsletter now reaches over 800 members from across the United States and Canada. My thanks go out to everyone who has taken the time to write.

With this issue of HAPS News, the reins of newsletter editor pass to Theresa Page of Texas Woman's University and I look forward to continuing my service to HAPS in another capacity as president-elect. As you can see from her first issue, Theresa aims to make HAPS News a more visually exciting publication than it has been in the past. Maybe you've also thought of possible improvements for HAPS News. If so, let your editor know what you'd like to see in the newsletter, send in your own pearls of wisdom, share classroom "tricks" with your colleagues, describe the problems you encounter and the solutions you find (or ask for help in finding solutions), and help others keep current by reporting new advances in your field of specialty. With Theresa's energy and dedication and with your continued contributions, our newsletter will thrive.

Sandra Grabowski,
Purdue Univ.
West Lafayette, IN 47907-1392

GREETINGS FROM YOUR NEW EDITOR

At the conference many of you made the comment that you did not have time to write an article because you were too busy teaching 20 plus contact hours each week. How do you do it? But what is even more amazing is that a few of you very busy people volunteered to write an article for HAPS News. I hope to hear from you in the very near future. Your suggestions for articles were outstanding.

But if your response to the idea of writing is the more typical, "Me write—you have to be kidding—I was terrible in English 101," kind of response, I have good news. If you can write an acceptable exam, most likely you can write an article for HAPS News. My primary job as editor is to help you communicate with other HAPS members; it is NOT my job to judge your worth based on the material you submit to the newsletter although it is my job to judge submitted material. Editor is defined "as one who edits" which is just another way of saying that I am a polisher of sentences constructed by others. My supporters (HAPS Editorial Board) will assist me in this very important task by reviewing (polishing) my writing before the newsletter is published. Let's put your creative ideas and my mundane editing together and turn out some terrific articles.

For those of you who have been steadfast and talented contributors to the newsletter, I give my heartfelt thanks and hope you will continue to contribute. Your efforts, along with those of Sandra Grabowski, have made the newsletter what it is today!

If we all work together and each of us does our part, everyone will benefit. Without contributions from all of you, the newsletter will cease to exist, so start those creative juices flowing and send me material for YOUR newsletter.

Theresa Page
Texas Woman's University

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Lima, Ohio 45804

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FIRST CLASS MAIL

Are you a victim of stress-induced forgetfulness?
This will be your last newsletter, if the member number on your address label is highlighted in yellow. Please renew your membership today; HAPS needs your participation.

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