Editor's Comment: I want to thank you for the opportunity to have served as the first editor of HAPS News. I hope to continue serving you in a new capacity during the years to come.

MESSAGE FROM THE PRESIDENT

The seminars, workshops, and various activities for the upcoming Human Anatomy and Physiology workshop (June 4-8, Madison, Wisconsin) have been finalized, so I would like to update you on the workshop. Elaine Marieb has graciously consented to be our keynote speaker at the annual banquet, and we have obtained excellent speakers discussing a variety of physiological topics for the seminar updates. The workshops are designed to provide a diversity of topics, and this agenda should satisfy most everyone's need for current enlightenment and information.

We have invited a large number of vendors for the products display area, and on the final day (Friday) most of the workshop membership will be transported to Dubuque, Iowa, for a wonderful riverboat cruise and a tour of W.C. Brown's facilities. So come one, come all, and enjoy what should be a most exciting workshop with updates, workshops, fellowship, and get-togethers to enlighten one's mind and to raise one's spirits. I look forward to meeting you at the workshop.

Membership at this point is at 390-plus and growing rapidly every month. We should also gain many new members at the workshop. As you can see, HAPS is already starting to take on the appearance of a fairly large future organization. At the workshop the election of new officers will be announced, and the amendments to the constitution will be voted on by the membership. A separate mailing with a ballot and a slate of candidates for each office will be arriving in your mailbox in the very near future.

Finally, I would like to inform you that the fine hotel hosting the workshop is presently undergoing a financial reorganization but has assured us that this factor will not in any way affect the workshop activities. So finalize your travel arrangements and block out June 4-8 on your calendar as a time for renewal, relaxation, and enjoyment.

Richard Steadman
President, HAPS

PROPOSED AMENDMENTS TO THE CONSTITUTION

The following amendments to the HAPS constitution will be proposed at the June meeting in Madison, Wisconsin:

Article 10 AMENDMENTS TO THE CONSTITUTION
10.1 The expiration date for the membership year shall be changed from the end of the calendar year to May 31.
10.2 If the Society were to be dissolved, then all remaining funds shall be divided equally among the current membership.
10.3 From June 1, 1990, through May 31, 1991, the Executive Committee may with a unanimous vote amend the constitution as necessary to comply with nonprofit status as defined by the Internal Revenue Service.

For your reference in considering these amendments, the current constitution is reprinted on the following page.

Lew Milner
Secretary/Treasurer
HUMAN ANATOMY AND PHYSIOLOGY SOCIETY

CONSTITUTION

Article 1 PURPOSE

1.1 This association shall be known as the HUMAN ANATOMY AND PHYSIOLOGY SOCIETY.

1.2 The goals of the Society shall be as follows:
   I. To promote and facilitate communication and collaboration among teachers of human anatomy and physiology in colleges, universities, and institutions.
   II. To promote and to organize professional development programs for the teachers of human anatomy and physiology in colleges, universities, and related institutions.
   III. To promote interaction with science teachers at all educational levels.
   IV. To provide the membership with opportunities to be informed about the latest developments in the health/science field.
   V. To facilitate communication with other sectors of the community and to collect and disseminate to the membership information regarding events of interest.
   VI. To encourage educational research and publication by human anatomy and physiology teachers.

Article 2 MEMBERSHIP

2.1 Membership in the Society shall be open to anyone with an interest in human anatomy and physiology regardless of race, creed, color, sex, age, or national origin.

2.2 An individual shall become a member upon payment of a membership fee, and will remain a member in good standing for the duration of the calendar year in which the fee is paid.

2.3 The Society shall maintain a registry of all members and their addresses. It is the responsibility of the members to ensure that their name and most current mailing address are on the central registry.

Article 3 PRIVILEGES OF MEMBERSHIP

3.1 All members in good standing shall have the right to vote at all meetings of the Society and to hold elective office in the Society.

3.2 All members in good standing shall receive a reduced rate at all sponsored seminars, workshops, or other activities.

Article 4 ADMINISTRATION

4.1 The affairs of the Society shall be managed by an Executive Committee consisting of a President, Past-President, President-Elect, Secretary-Treasurer, and three Members-at-Large.

4.2 The members of the Executive Committee shall be elected at the Annual General Meeting and shall remain in office for a term of one year.

Article 5 NOMINATIONS AND ELECTIONS

5.1 A Nominating Committee serves to prepare the ballot of nominees for elected positions within the Society each year. Its chairperson is the President-Elect; three other members are approved by the President and approved by the Executive Committee.

5.2 The Nominating Committee will request nominations for officers from the membership three months prior to the annual meeting.

5.3 No error or omission in the mailing of a ballot shall invalidate such election where such error or omission was made in good faith and for no improper purpose.

5.4 Vacancies occurring between elections shall be filled by Executive appointment. Such appointments shall require unanimous support of the remaining members of the Executive Committee.

Article 6 MEETINGS

6.1 An Annual General Meeting (AGM) shall be held each and every year, preferably in June.

6.2 Notification of the time, date, and place of the AGM shall be mailed to all members of the society not less than 60 days before each meeting.

6.3 Ten percent of the members shall constitute a quorum for any general meeting of the Society.

6.4 No error or omission in the giving of notice of a meeting shall invalidate such meeting or invalidate or make void any proceedings taken or had at such meeting where such error or omission was made in good faith for no improper purpose.

6.5 Four members shall constitute a quorum for any meeting of the Executive Committee.

6.6 A member of the Executive Committee who is absent for three (3) consecutive meetings (or 50 percent of the meetings) may be asked to resign his or her position on the Committee.

Article 7 DUTIES AND POWERS OF THE EXECUTIVE COMMITTEE

7.1 The President shall call and preside at all general meetings of the Society and the Executive Committee. He/she shall be responsible for ensuring that all affairs of the Society are conducted in a manner consistent with this constitution.

7.2 The President-Elect shall generally assist the President in the performance of his/her duties and shall assume those duties if the President is absent or unable to act and has automatic succession to the presidency.

7.3 The Immediate Past-President has automatic succession to the past-president position and has various responsibilities assigned by the President, provides leadership continuity, and helps assure strong future officer succession.

7.4 The Secretary-Treasurer shall be responsible for notifying the membership of all general meetings. He/she shall receive all moneys paid to the Society and shall deposit all such moneys in a chartered bank in the name of the Society. He/she shall keep a complete set of financial records for the Society and present financial reports as required. He/she shall maintain a list of the current membership. At the end of his/her term of office, he/she shall turn over all funds and financial records to his/her successor.

7.5 It shall be the duty of the Executive Committee to meet at the request of the President to deal with any business of the Society.

7.6 The signing officers of the Society shall be the President, the President-Elect, and the Secretary-Treasurer. The signatures of the President and any one of the other two shall be required on all documents signed on behalf of the Society. A single signature is required on all checks.

7.7 The Executive Committee shall be empowered to appoint or dissolve sub-committees as required.

Article 8 APPOINTED OFFICERS

8.1 Editor—Responsible for all formal publications sponsored by the Society, including its Newsletter, the Editor recommends publication policies, schedules, style, and budgets to the Executive Committee.

8.2 Membership Committee Chairperson—This chairperson vitalizes the committee called to stimulate membership and foster interest in the aims and purposes of the Society among college teachers of science and commercial endeavors serving them.

8.3 Archivist—The Archivist collects, organizes, and secures the historical records and official notes of Society past officers for useful and legitimate access. He/she shall be responsible for ensuring that the proceedings of all meetings are recorded. He/she shall furthermore be responsible for maintaining on file all correspondence and other documents of the Society.

Article 9 AMENDMENT OF THE CONSTITUTION

9.1 Any motion to amend this constitution must be proposed by either:
   (a) The Executive Committee OR
   (b) A member of the Society supported by at least five additional members.

Any such motion must be made in writing and be delivered to the Secretary, who will present the motion at an Annual or Special General Meeting. No amendments will be allowed to the motion at the meeting.

9.2 An amendment to the constitution shall require the approval of two-thirds of the members.

9.3 A copy of any proposed amendments to the constitution shall be included with the notice of the meeting at which the amendment is to be considered.
When there are multiple laboratory sections in a course, and practical examinations are given in the laboratory, there is sometimes concern among students that those individuals taking an exam given during the last laboratory section have an advantage over those who are taking the exam in earlier laboratory meetings, as information is passed from one student to another. Many years ago I did away with this concern by posting the exact questions for the laboratory tests at the beginning of the term. Questions for a given exam are the same for all sections, and I merely change the answers. Examples of the questions would be: (1) Name the bone marking at the end of the pointer on this bone and indicate whether it belongs to the right or left side of the body; (2) Identify the portion of the brain at the end of the pointer on this autopsy specimen; (3) Identify the blood vessel at the end of the pointer on this cadaver; (4) What is the name of the digestive structure at the end of the pointer on this slide, etc. Using this technique, all students are aware of the questions from the very beginning of the term. There is no advantage for a student in a later section over a student in an earlier section in that the answers are changed from section to section. From the very beginning each student knows how many questions will be asked on charts, models, cadavers, autopsy specimens, microscope slides, etc. We have two 1 1/2-hour laboratory periods per week in our course, and the exam takes only one hour, so there is a half-hour between laboratory sections to move pins to new structures. The laboratory exams are strictly practical, and questions concerning functions of structures are asked in lecture examinations which are given to all students at the same time. I have found the students very appreciative of the fairness of this system.

Richard Welton

DYNAMIC PHYSIOLOGY OVERHEADS FOR TEACHING THE PRESSURE-VOLUME LOOP IN THE CARDIAC CYCLE

A multilayered overhead approach can greatly improve the understanding of the pressure-volume (P-V) loop in cardiovascular physiology. The P-V loop is presented in Fig. 1 demonstrating left ventricular pressure (LVP) and volume (L.V. VOL.) during filling, isovolumic contraction, ejection and isovolumic relaxation for a cardiac cycle. To use these multilayer overheads, cut out Figs. 1, 2, and 3, enlarge them by 200 percent, and make overhead transparencies of each. Use Fig. 1 as the bottom transparency to demonstrate the P-V loop. Placing Fig. 2 overhead over Fig. 1 will indicate when the mitral valve is open and closed during the cardiac cycle and what the left atrial pressure (LAP) and left ventricular pressure (LVP) differences are that cause the opening and closing of this valve. Placing Fig. 3 overhead over Fig. 1 will show when the aortic valve is open and closed during the cardiac cycle and what the left ventricular pressure (LVP) and aortic pressure (AP) differences are that cause the opening and closing of the aortic valve. Placing the three overheads over each other simultaneously will result in a composite P-V loop (Fig. 4). [I recommend "coloring" the mitral valve lines and legends (Fig. 2) red with a permanent marker and the aortic valve lines and legends (Fig. 3) blue (or any color of your choice) to enhance the visual effects.]

Donna Van Wynsbergh
USING UNKNOWNS IN A URINALYSIS LAB

We have a total of three lab periods of two hours each that are devoted to the urinary system. The first lab covers the traditional study of the gross anatomy of the system in general and the kidneys in particular. Available to the students are various torso models, individual kidney models, injected and uninjected pig kidneys, and human kidney specimens.

A second lab period is devoted to the microscopic examination of the kidney with the greatest emphasis on the nephron and its components. Students make use of models showing the microscopic structures and also view an injected kidney slide for blood vessels and a stained human kidney slide for identification of the major nephron components. An excellent lab reference text for these microscopic structures is the Atlas of Human Histology by Mariano S. H. diFiore, Lea & Febiger.

The third lab period involves the physiological aspects of the system. Students view a “canned” physiograph presentation (Cassette Data Tapes from Narco Bio-Systems) showing the response of rabbit kidneys to vagal stimulation, adrenalin, glucose overload, ADH, and hemorrhage. The students then perform a urinalysis on their own urine sample using a hydrometer and Labstix Reagent Strips checking pH, glucose, protein, ketones, and blood. Since seldom are deviations from the norm observed, students will also check unknown “urines” that are indicative of diabetes mellitus, diabetes insipidus, prolonged fasting, and bleeding from the urinary tract. These unknown “urines” are completely artificial and are put together in the lab at minimal cost. The students wear gloves and handle only their own urine samples; and since the unknown “urines” are synthetic, the risk of handling infectious body fluids is reduced. By discussing the test results from the unknowns and how the results relate to various conditions, the students gain a better understanding not only of the functioning of the system, but of the diagnostic value of urine testing and screening.

The lab is concluded by performing early pregnancy tests on control urine samples and a discussion of phenylketonuria.

Copies of the lab objectives and a list of supplies can be obtained from:

Lewis M. Miler
North Central Technical College
2441 Kenwood Circle
P.O. Box 698
Mansfield, OH 44901-0698

HAPS News is owned and published by The Human Anatomy and Physiology Society.

Dr. Paul Holmgren, Editor
HAPS News
Box 5640
Northern Arizona University
Flagstaff, Arizona 86011

PHILIP TATE
PHOENIX COLLEGE
PHOENIX AZ 85015