ANATOMY & PHYSIOLOGY WORKSHOP

A national anatomy and physiology workshop was conducted at Triton College, River Grove, Illinois, during the first week of June 1987. Attending the workshop were college and high school anatomy and physiology instructors representing institutions in eleven different states. The workshop was sponsored by the Illinois Association of Community College Biologists, the Community College Section of the NABT, and the Triton College Conference Center.

The intent of the workshop was to provide an opportunity for the professional growth and development of anatomy and physiology instructors. This development included instant updates in various subdivisions of anatomy and physiology, opportunities to dissect and study structures on human cadavers, computer laboratories in muscle physiology, respiratory physiology, and electrocardiography, laboratories to determine glucose and cholesterol plasma levels, urinalysis labs, and field trips to view new technologies currently being used in medicine.

During the first two days of the workshop, seminars were presented by area medical school professors, physicians, and university professors. Topics covered during these seminars were acid-base disorders, surface anatomy, neurotransmitters, lipid metabolism and atherosclerosis, the cytoskeleton, body imaging techniques, and new advances in the fields of endocrinology and immunology. Dr. Angelo Scano, a world authority on lipid metabolism with more than 180 published articles, discussed the most recent research available on atherosclerosis. Dr. Ann Lawrence, professor at Loyola’s Stritch School of Medicine and a member of the National Advisory Research Resources Council of NIH, stressed the importance of the autoimmune response to the development of many endocrine diseases.

Steve Flora, vice president of Intelligent and originator of the Physiogrip, Cardiocomp, and Spirocomp computer software programs, assisted as the participants worked with programs studying muscle fatigue and the measurement of lung volumes. Participants also observed demonstrations of the Cardiocomp program, muscle twitch, and tetanus.

During the week, participants had an opportunity to dissect a specific region on a human cadaver, assist in the removal of the anterior thorax on a cadaver, and observe prosected structures of the limbs, thorax, and abdomen.

The blood and urine laboratories consisted of experiments to measure plasma glucose using the glucometer, a test for measuring cholesterol levels using small amounts of plasma obtained from capillary tubes after a finger stick, analysis of crystals in urine, and measurement of urea nitrogen levels in plasma and urine. As a part of this laboratory, participants also had the opportunity to visit the medical lab of a suburban hospital to observe the latest technology currently being used in blood and urine chemistry.

On the final day, field trips to Rush-Presbyterian-St. Luke’s Medical Center and the University of Illinois Medical Center were arranged to observe the new technologies of ultrasound, computer tomography, and magnetic resonance imaging.

Evaluations received from the participants emphasized the need for continued opportunities for this type of professional development designed specifically for anatomy and physiology instructors. As a result of this response, Triton College will host a second anatomy and physiology workshop on June 6-10, 1988. Instructors from different states will be involved in the planning of this workshop, with the intent to again provide instant updates in subdivisions of anatomy and physiology, and also to provide an open forum for the exchange of creative and innovative approaches to teaching anatomy and physiology.

Robert Anthony
Coordinator of the 1987 A & P Workshop

Dear Robert,

I would like to extend my congratulations to you and your staff in presenting the valuable workshop I have recently been privileged to attend at Triton College in Anatomy and Physiology. The program presenters, Dr. Rasenick, Dr. Lane, Dr. Lawrence, and Dr. Scano challenged us with the latest scientific research events to carry into our classrooms. Your organization of each session, so that no valuable time was wasted, was really impressive. Each of us had opportunity to ask those questions, many of which our own students ask us, both to the research scientists and to fellow workshop participants. We all learned a lot from each other during our breakfast, lunch, and dinner conversations.

The computer labs provided the necessary experience needed to evaluate current software for physiology experiments. Also, the opportunity to work with your student laboratory set-ups in blood chemistry and urinalysis gave me some new activities to include in our laboratory for our AD-RN students.

The dissection of cadavers by teams and the continual showing of video tapes on cadaver dissection for our learning and evaluation during breaks provided a complete review of gross anatomy. This was Barb Bowen’s first opportunity to dissect cadavers, her masters degree being in plant biology, and the learning opportunity was tremendous. Our goal is to begin using cadavers in our classes this year to demonstrate anatomy. This workshop has given me new courage to pursue this endeavor.

We thank you for coordinating the bus transportation each day to Triton, to lunch, and to and from dinner. We did not anticipate all of the tremendous organization, the personal attention, the total usage of each hour at Triton, and the wonderful friends we made during our visit. We will certainly remember Jay Omori and the long hours she put in to care for us. She is a very special person that we all appreciated.

Arlene Wolff
Fox Valley Technical Institute
Appleton, Wisconsin

The week was wonderful, and I would be honored to attend another workshop as productive and well organized as this one.

Barbara Bowen
Fox Valley Technical Institute
Appleton, Wisconsin
NURSING EDUCATION
The winds of educational reform are everywhere these days. In higher education, prominent themes include renewal of liberal education, assurance of student involvement in learning, and assessment of student learning outcomes as indicators of quality. Nursing education in four-year colleges and universities has felt additional pressures for curricular change because professional nurses carry additional responsibilities in the health care system. Increased use of complex technology, shorter hospitalization, and movement of care into community settings require well-educated nurses, able to function interdependently with other health care professionals.

The teaching of anatomy and physiology to nursing and pre-nursing students will be affected by these areas of change. Learning in the biological sciences is important not only for nurses' expanded clinical roles but also because these sciences are basic elements of a liberal education. Two recent projects at the American Association of Colleges of Nursing reflect this stance. The report, "Essentials of College and University Education for Professional Nursing," endorsed by the Association's membership in October 1986, makes recommendations about liberal education as well as describing a wide range of clinical judgments and related skills necessary to practice professional nursing on graduation with a BSN or advanced first professional degree.1 Throughout the document, there are references to content and skills from anatomy and physiology. And in a nationwide study of senior students in generic baccalaureate nursing programs completed by the Association, 99.7 percent of students indicated that content in anatomy and physiology was very important or important in preparing for professional practice. Virtually all students are required to complete these courses.2

So, a strong base in anatomy and physiology remains an essential ingredient in nursing education. Besides the challenges of curricular change for an expanded professional role and for institutional accountability for quality student learning, new areas of subject matter are becoming more important. For example, research on the nervous system, including that in neuroimmunology, promises to provide new and important insights for nursing practice. Understand-

ing of auto-immune diseases, tissue rejection, and neuroendocrine mechanisms will need to be incorporated into basic coursework preparatory to professional nursing education.

Nursing educators look forward to working with you as we plan the preparation of professional nurses for the 21st century.


Barbara K. Redman, Ph.D.
Executive Director, American Association of Colleges of Nursing
Washington, D.C.

ESTABLISHING A CADAVER LABORATORY
Cadavers are used in community colleges and universities throughout the country. In Illinois, over ten community colleges are actively using cadavers and several others are in the planning stages.

Once the school board has approved the request for cadavers, it is necessary to find funding. At Olney Central College, our Foundation provided about $3,200 (1983) which included purchasing two cadavers, used gurneys to store the cadavers, a lab exhaust fan, dissecting kits, atlases and dissecting books, body bags, an insulated cadaver storage area with a prep room containing an air conditioner and air exchange apparatus, transportation fees, preservatives, and consultation fees. The starting cost is expensive; but considering the yearly cost of cats or minks over a 7-8 year period, the total cost and maintenance could be within the limits of most biology budgets.

To obtain a cadaver from the Demonstrators Society in Chicago, five requirements were fulfilled by Olney Central College:

1. The president or dean of your college must write a letter to the Demonstrators Society explaining the educational need and state that a qualified person will perform the dissection.
2. The cadaver(s) must be stored in a lockable room away from public view.

3. There must be a one-time inspection by a participating university or by the Demonstrators Society. Usually a qualified human anatomy professor checks out the facility, makes recommendations, and orient the teacher to the proper respect, security, and care of cadavers. This person now acts as a consultant for further questions.

4. The school must have the cadavers properly cremated following study.

5. The school must post a $1,000 surety bond from an insurance company to guarantee compliance with state law.

I have found using cadavers worth all the trouble required to fulfill these requirements. Cadavers enhance learning by promoting student interest and motivation.

Dr. John Stencil
Olney Central College
Olney, IL

A/P NEWSLETTER
The idea of a newsletter prepared expressly for professors of anatomy and/or physiology is one that I support with considerable enthusiasm. I can think of no better way to improve communication between members of this special group concerning important dates, events, and topics of common interest. Congratulations to the organizers, writers, and publishers of The Anatomiast/Physiologist. I wish them well in this very worthwhile venture, and I urge readers of this new publication to provide the help and assistance that will be needed to assure its success.

John W. Hole, Jr.

Communication—the essence of education—is made possible through written and spoken information and thoughts. I am excited about the potential for communication amongst instructors of human A & P courses made possible by The Anatomiast/Physiologist. I applaud and support those colleagues responsible for the worthwhile newsletter.

Kent M. Van De Graaff, Ph.D.
Brigham Young University
Provo, Utah

SUBMIT INQUIRIES REGARDING THE ANATOMIST/PHYSIOLOGIST NEWSLETTER TO DR. PAUL HOLMGREN, BOX 5640, DEPARTMENT OF BIOLOGICAL SCIENCES, NORTHERN ARIZONA UNIVERSITY, FLAGSTAFF, AZ 86011.