

Technologist News

JRC-NMT Takes Care of Business on AMA Course Accreditation

Credentials adhere to programs as well as to people and, to anyone thinking of devoting a year or two of his or her life to a course in nuclear medicine technology, the most important one reads "accredited by the Council on Medical Education of the American Medical Association."

At the present time, 102 educational programs in nuclear medicine technology have earned this cachet. About 30 more should join the select list next year and still others are standing by for consideration.

Such numbers—viewed in the light of the fact that accreditation for such programs was only an idea until the first *Essentials* for nuclear medicine technology courses was adopted in 1969—gives some notion of the rapid growth of the field as well as the wide availability of quality training for the prospective technologist. And now there is a brand-new, updated 1976 *Essentials* encouraging "hands on" performance-oriented teaching.

These developments betray the presence of a guiding force behind it all. The official working title is "Joint Review Committee on Educational Programs in Nuclear Medicine Technology." The working organism is a small body of 12 members responsible for drafting the recently adopted *Essentials of an Accredited Program for the Nuclear Medicine Tech-*

nologist and, more important, for applying the standards spelled out in this document to evaluating nuclear medicine technology teaching programs around the country. The committee is one of 16 similar medical specialty advisory groups making accreditation recommendations to the AMA's Council on Medical Education, the actual accrediting body.

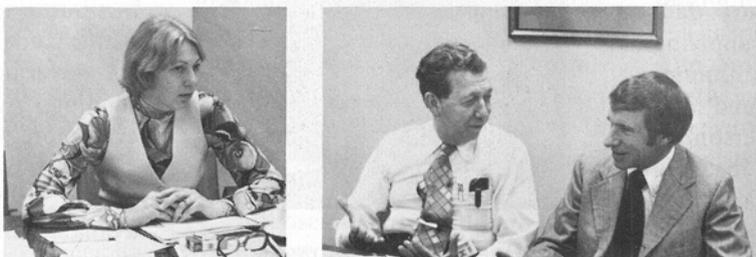
The Society of Nuclear Medicine plays a key role in JRC-NMT seating, supplying a contingent of four

tatives of SNM on the JRC-NMT currently are physicians David V. Becker and W. Newlon Tauxe and technologists Mark I. Muilenburg and Elaine J. Cuklanz, Dr. Tauxe and Ms. Cuklanz serving as JRC-NMT vice chairman and secretary-treasurer, respectively, for the coming year. Readers may also recognize the names of the non-SNM committee members, however, since most are also active and visible members of the Society: ACR, James H. Christie and C. Douglas Maynard; ASCP,

Oscar B. Hunter and Dwight K. Oxley; ASMT, Diane Coiner and Connie Madjak; and ASRT, Vernon Ficken and Glenn A. Isserstedt.

Dr. Hunter, himself a nuclear medicine practitioner for more than 25 years, is the second chairman of the

JRC-NMT, succeeding Earl M. Chapman to that post two years ago. He will remain as chairman until at least October 1977, having just been re-elected to a third one-year term by his fellow committee members at the most recent JRC-NMT meeting in Washington, DC, Oct. 8. Dr. Hunter operates the well-known nuclear medicine/pathology facility in Washington that bears his father's name, the Oscar B. Hunter Memorial Laboratory, but he somehow finds the time to coordinate the activities of the committee he heads, to preside at its semiannual meetings in April



Elaine Cuklanz (left), secretary-treasurer, Dr. Oscar B. Hunter (center), chairman, and Warren Ball (right), providing AMA liaison, were among those conferring at the most recent meeting of the JRC-NMT, Oct. 8.

(two physicians and two technologists) to the full committee membership of 12. The four other cooperating organizations designate the remaining eight members, four of whom are physicians (ASCP and ACR) and four technologists (ASMT and ASRT). The balance of physicians and technologists is thus exactly maintained at six each.

As always in nuclear medicine, a good deal of organizational cross fertilization is revealed by the names of the committee members, most of whom belong to several of the collaborating groups. Official represen-



Coming up with the right recommendations for course accreditation is a process that requires careful thought. Giving matters a thorough review are Dr. David V. Becker (above)...

and October, and to personally perform some of the 30 or so inspections of training sites scheduled by his committee at each session.

As Dr. Hunter explains the process, program accreditation begins with a letter from the hospital, university, junior college, or medical center seeking course accreditation. An application form is then forwarded by the committee staff and filled out and returned by the applicant to the committee. The completed application, bearing the necessary data on size and location of the applying institution, scope of program, number of students, background and work load of teaching personnel, available equipment and teaching aids, and course curricula, is at this point passed on to a member of the committee designated to perform an evaluation of it. Evaluations are in turn considered by the full committee, this step forming a main part of the business of JRC-NMT during its semiannual meetings—and it is here by vote of the full committee that applications are either set aside or graded as sufficiently promising to merit site visits.

The site visit is logically the next part of the sequence, and it is crucial to the accreditation process, according to Dr. Hunter. No program can be officially recommended for accreditation without one. Members of the committee themselves regularly perform site inspections, but need and get some help from a backup group of more than 100 volunteer

site visitors, each of whom is already connected with some accredited nuclear medicine technology program.

When an applicant is formally designated for a site visit, Dr. Hunter explains, "We appoint two visitors, one a physician and one a technologist. The evaluation itself takes one to two days and consists of identifying clearly the nature of the program, how it works, and who's doing it, as well as a review of the physical layout of the area and the amount of work that's being done."

Interviews with students form an important part of the site tour, too, he adds: "We talk to students in the program and ask them if they think they're getting what they ought to out of it. We find out what they think is good about the program and what they don't like about it. And these comments become part of the evaluation."



...Dr. C. Douglas Maynard...

Site visits have a value for the site visitor, too, says Dr. Hunter. "You really don't know the problems unless you get out in the field to see what's going on. We have all gained a great deal from the experience and are better able to evaluate programs once we sit down here in the committee."

Site evaluation reports thus become a critical and sizable part of an applicant's file and part of the full dossier examined at the next available JRC-NMT session.

"At that time," says Dr. Hunter, "we can go in a number of different directions: full accreditation, accreditation with qualifications—this would list those areas that are defi-

cient and in need of correction, or nonaccreditation. There is also something else called a 'Letter of Support' that we might send to an institution we feel has a good chance of accreditation on the basis of the paperwork we've seen but which has not been site-visited. This has replaced a discontinued category we used to have called provisional accreditation and it can be helpful to an applicant, but it falls short of recommendation for accreditation."

Recommendation for accreditation by the JRC-NMT is finally what all applicants seek, but it is only the next-to-last step in the process, final disposition being the province of the AMA's Council on Medical Education, the official accrediting authority under which JRC-NMT acts as expert advisor. In fact, accreditation normally flows from JRC recommendation, leading to the inevitable question of what that label really means for a given program, the institution offering it, and the student taking it.

According to Dr. Hunter, measurable benefits accrue to the teaching institution in the form of more and better students and better prospects for government as well as private funding. Accreditation may mean even more to the individual student, he feels, however, since VA and other federal grant money is simply not available for nonaccredited courses. "Even more important," he explains, "accreditation means the student can plan to take the registry exam. For about a year now, the ARRT has restricted its nuclear medicine tech-



...and Mark I. Muilenburg.

nology exam only to graduates of accredited courses or courses with a Letter of Intent to accredit. The ASCP has no restrictions at this time, but probably will in the future."

And what do Dr. Hunter and other members of the JRC-NMT themselves derive from the process they have become part of? First, of course, there is the satisfaction of helping contribute to the upgrading of nuclear medicine technology teaching across the country, the progress of which is certain, according to Dr. Hunter. Second is the equally great satisfaction of watching the field grow. Dr. Hunter is not one of those with doubts about the future of nuclear medicine practice.

"It's a very vigorous field," he ob-

serves. "From our standpoint we can see that the amount of work going on in nuclear medicine is tremendous and growing, partly because the development of the instrumentation over the last 5 years has been so phenomenal. But the biggest, most rapidly growing field is the radioimmunoassay."

The need for more technologists to prepare and perform the growing number of scans and RIAs, Dr. Hunter adds, is apparent not only from the proliferation of quality teaching programs becoming available for the budding technologist, but from the number of students signing up to take them and then finding work after completion of their studies. According to Dr. Hunter, the

only part of the country where trained nuclear medicine technologists have any problem with placement is New York City: "Every place else, graduates are absorbed as fast as they are produced," he notes, "and I think New York's placement situation has a lot to do with the fiscal crisis there. Nationwide, this is a field that is still expanding."

"About 5 years ago," Dr. Hunter recalls, "there were about 5000 nuclear medicine technologists and we projected at that time that we would need 10,000 to 12,000 by now. But the actual need is more like 25,000 now and that need is not yet satisfied. The field has really grown twice as fast as we thought it would."

And twice as fast isn't half bad.

Midwinter Night's Dream: Technologists Get Set for Las Vegas Meeting

January 28-30, 1977. Remember it well, for that will be the weekend when Las Vegas will assure itself a name in the annals of nuclear medicine history.

The plans are going full steam ahead for the Fourth Annual Winter Meeting of the Technologist Section. And this year the Annual Meeting will offer more exciting and useful educational sessions—especially geared to technologists—than ever

hance the skills of technologists. Paul believes that as the field of nuclear medicine advances and becomes more complex, technologists are faced directly with the responsibility of physicians relying heavily on them for support and expertise in making new procedures and devices a part of the routine clinical setting."

To those aims the program hopes to familiarize all with the most recent applications of radiopharmaceuti-

tors. As last year, Michael Cianci will be moderating the lectures and setting up the hands-on workshop.

Through the generosity of many companies, the RIA procedures during the hands-on workshop will have wide variety, to benefit as many technologists as possible. Assays are being provided by Abbott Laboratories (digoxin), Amersham/Searle Corp. (SLE), Beckman, Inc. (TSH), Bio-Rad Laboratories (B₁₂ and folate), Corning Glass Works (T₃ and T₄), Nichols Institute (cortisol), Pharmacia Diagnostics (RAST allergen), Roche Diagnostics (CEA), and E.R. Squibb & Sons, Inc. (renin). In addition, Abbott Laboratories, Beckman Instruments, Inc., Pharmacia Diagnostics, and Searle Analytic, Inc., are providing the necessary state-of-the-art equipment for the RIA tests.

Imaging is also receiving considerable attention at the meeting. Don Bernier is the coordinator of the lectures and workshops designed to bring technologists up to date on recent advancements, instrumentation, and procedures in many applications. One of the most exciting recent developments in imaging—the por-

...the program hopes to familiarize all with the most recent applications of radiopharmaceuticals, new instrumentation, education and training methods, and administrative procedures.

before. Paul Christian and the Scientific Program Committee which he chairs have made certain of that.

"The objectives of the Technologist Section and its Scientific Program Committee are outlined to meet the educational needs of the technologists," states Paul, and with that in mind his committee has worked hard at designing a program to en-

hance the skills of technologists. Paul believes that as the field of nuclear medicine advances and becomes more complex, technologists are faced directly with the responsibility of physicians relying heavily on them for support and expertise in making new procedures and devices a part of the routine clinical setting."

Radioimmunoassay will this year consist of lectures at three levels of ability: basic, intermediate, and advanced—with Tom Persoon, MS, John Langan, PhD, and Emitt Eldred, PhD, as the respective instruc-

table scintillation camera—will be featured in a hands-on workshop. All five manufacturers of this equipment—Elscent, Inc., Ohio-Nuclear, Inc., Picker Corporation, Searle Radiographics, Inc., and General Electric Medical Systems Division—will exhibit their machines, each camera being introduced by a technologist familiar with its clinical applications. Participants will be able to discuss first hand all the advantages and drawbacks of these units.

Drs. Barry Siegel and R. Edward Coleman will hold a workshop entitled "Imaging—the Current Status, and Direction for the Future." In it they will discuss the current applications and utilization of various imaging modalities in medicine, and the evolution and expectations for these devices in the future.

Workshops on computer applications to imaging are also being set up. Dr. Wayne Wenzel and Pat Avery will be the instructors in those and plans are now to have one at the introductory and one at the intermediate level of application; the intermediate one is recommended to those who already have some computer-application experience. Don Hamilton, of the Bureau of Radiological Health, will be the host for a session on quality control assurance of scintillation cameras.

Education Workshops

Great emphasis has been placed on the education program, with seven different sessions scheduled. Richard Pollock, the coordinator, has planned a variety of offerings that will benefit not only those technologists involved in educational programs, but also provide general information to broaden everyone's background. For example, Don Hamilton will present "How to Make Your Own Slide-Tape Presentations."

The basic premise of these sessions will be to provide information for educators that can be used and applied on a daily basis in preparing students to function as competent technologists. There will be a special workshop on what to expect from an AMA site visit, presented as a



The day/night glitter of the famous Las Vegas Strip. More than 3 miles of colorful marquees stand out against the skyline, culminating in downtown Las Vegas and Fremont Street in the distant background.

panel discussion. The panel discussion format will also be used to evaluate the use and importance of admission testing for entrance into nuclear medicine technology programs.

On a related topic, a session will examine the role of training programs in providing continuing education for technologists. The new *Essentials for Nuclear Medicine Training Programs* and its impact and significance will also be discussed.

Strictly for educators, "NMT Teachings Aids—What's Available and What's Needed," will provide a look into what materials are available for teaching, as well as examine their drawbacks and suggest what new ones should be developed. "The Role of Statistics in NMT Training" will describe what mathematical and statistical skills are vital to the modern nuclear medicine technologist and how to incorporate them into your training program.

Administration will not be forgotten, as Leo Lopez presents his workshop "Behavior Modeling: Supervisory and Management Training."

Relax and Enjoy

Naturally, no one expects to go to Las Vegas without some entertainment in mind.

For starters, the meeting will be held in the grandiose Las Vegas Hilton. All of your needs and desires can be accommodated with such ease by the Hilton that you may never want to leave it while you are in Vegas. Everything from the grander than grand casino to a Youth Hotel to keep your kids occupied is on the spot. There is also the largest nightclub in the city, the Hilton Showroom. Would you believe that Ann-Margret will be appearing there just that weekend?

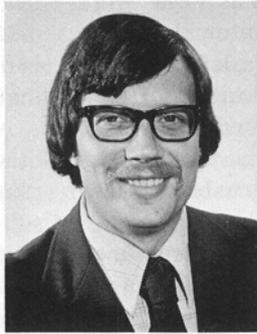
Culinary delights will astound you. The Hilton has French, German, Japanese, Italian, English, and American restaurants, all appropriately decorated, and an 800-seat, 24-hour Market Plaza restaurant with varied goodies. Unmatched anywhere else is the Benihana Village: five Japanese dining areas and four cocktail lounges set amidst rock formations, waterfalls, foliage, and structures of a Japanese village.

Is your enthusiasm now unrivaled but your finances short? Don't worry. The Technologist Section has been able to secure rooms for you at the sumptuous Hilton at incredibly low prices. Just \$29 for a single and \$35 for a double. So be sure to get your reservations in fast while there is still space.

Message from the President

Within the past few years, I feel the Section has developed into an organization of initiative, not reacting only to crisis.

The development of a position paper on licensure is a case in point. This document was very useful in a recent situation pertaining to licensure. The House and Senate had both passed Health Manpower bills. The Senate version contained a section on licensing of radiologic technologists. Because proposed state and federal legislation have often included nuclear medicine technology within radiologic technology, I felt it important that the Section take initiative. I wrote to members of the House-Senate Conference Committee on the Health Manpower Act stating that nuclear medicine technology must be identified as a separate professional entity. Also enclosed was a copy of the position paper. The section on the licensure of radiologic technologists was subsequently deleted from the bill. This is an example of Section initiative having real IMPACT.



The Nuclear Medicine Technology Certification Task Force met Sept. 21-22, 1976, in New York. Prior to the meeting, requests for examination proposals had been sent to seven examination services. Four detailed proposals were received in return. During the Task Force meeting the concept of an independent nuclear medicine technology board examination was discussed in depth. The philosophies of criterion-referenced versus norm-referenced examinations were discussed in relationship to the overall test development process. Topics discussed were task analysis, item writing, validation, pass/fail determination, administrative costs, test development costs, ideas on proposed board structure, and a timetable for implementation if the Section decides to approve the board at the Las Vegas meeting. I feel that the area of certification is an area in which we will have great IMPACT.

To date, we have made progress and have some accomplishments already behind us. This can continue only with the support and input from you, the members, who are the Section.

MARK I. MUILENBURG
Creighton Memorial St. Joseph's Hospital
Omaha, Nebraska

If the Hilton intimidates you, there is a whole whirling day/night city outside (once you get past the Hilton's swimming pools, tennis courts, shuffle boards, and golf terrain). Lights, life, fun, entertainment, and losing the shirt off your back are just part of the thrills possible. And if Las Vegas leaves you out of breath, you can always go for a day's skiing in the Rockies, or fishing and boating at Lake Mead, or take a shower under Hoover Dam.

Exhibitors are eagerly awaiting all of you too. Participants at the workshops will be able to sign up for sessions to visit the exhibits, and one special session will be scheduled for all attendees. And be sure to arrive on time for the ice-breaker cocktail party in the exhibit hall on Thursday at 6:30 p.m.!

The Section's National Council delegates will be meeting Wednesday and Thursday, with most committee

meetings scheduled for Wednesday. President Mark Muilenburg and the NMT Certification Task Force will be reporting on their progress to the National Council at that time and will make a proposal as to whether or not an independent nuclear medicine technology examination board should be established. Mark will also dis-



The fabulous Las Vegas Hilton, site of the 4th Annual Meeting of the Section.

cuss the topic before the full Section at the opening session of the meeting.

VOICE accreditation has been applied for and several sessions will offer CEUs for attendees; PAR credits will also be given for many activities.

Paul and the Scientific Program Committee, for all their input and hard work, will hardly have enough time to take a deep breath when the meeting is over. They already are planning the workshops, sessions, and arrangements for the presentation of scientific papers and exhibits at the 24th Annual Meeting of the Society in Chicago this June. The Technologist Section is in constant need of input and suggestions from its members regarding the material and format which should be used for scientific programs to meet the current needs of the field. You are urged to contact Paul Christian as soon as possible with any ideas that you may have for June or for future meetings.

Task Force Meets, Explores New NMT Registry Examination

Members of the NMT Certification Task Force met for two days of discussions on Sept. 21-22 to explore the implementation of an independent nuclear medicine technology examination board. This meeting was the first meeting of the Task Force, following three months of intensive research by its individual members.

Present at the meeting, held at the new National Office headquarters in New York City, were President Mark Muilenburg, President-Elect James K. Langan, Treasurer Sue Weiss, and the National Council Delegates Vi Custer, Sue Hemingway, Joan Herbst, and Jim Kellner. The other members of the group—George Alexander, Barbara Horton, Tony Mazzola, and Glenn Moran—were unable to attend.

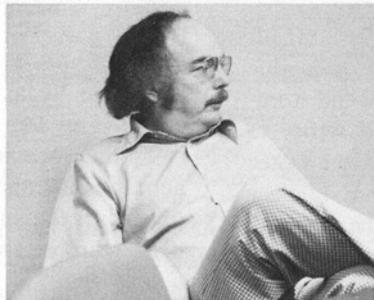
The Task Force was created by President Muilenburg in late June, following a resolution by the National Council delegates of the Section. The resolution, passed during the Council meeting on June 10 in Dallas, stated that the delegates "are in support of the concept of an independent nuclear medicine technology examination board under the auspices of

...we have to get everyone in nuclear medicine to believe in the credibility of our examination...

the Society of Nuclear Medicine Technologist Section." It also called for a committee to study the implementation of such a board, the committee being "comprised of at least five National Council delegates plus whomever else the President wishes to appoint."

The primary purpose of the meeting was to consider and discuss all aspects of implementing a certification examination. The resolutions stemming from the September meeting and a Task Force meeting just

prior to the 4th Annual Winter Meeting of the Section in Las Vegas will be presented to the National Council at that time. The Task Force had to consider the composition of the board and a developmental process and examination format that would have enough credibility to be respected throughout the medical community. "We would have to get everyone in nuclear medicine to believe in the credibility of our examination," according to President Muilenburg.



Ideas for the establishment of a certification board were shooting left and right. President-Elect Jim Langan makes a proposal and Treasurer Sue Weiss listens carefully prior to giving her suggestion.

Toward that goal, the examination would be of such quality that a person passing it would be considered fully competent in all areas of nuclear medicine technology as it is being practiced. The examination should be able to identify qualified technologists, regardless of their previous education and training.

An examination setup which qualifies well, and one explored at length during the meeting, is the criterion-referenced examination. This relatively new testing format depends upon the identification of the essential knowledge that is necessary for competency by everyone working in a particular field. This identification process begins with an in-depth task analysis, which has been begun by the Task Force.

The advantage and credibility in competency testing of criterion- over norm-referenced examinations are that the score in such a test is a measure of the examinee's competency. Each score is interpreted against a predetermined standard of funda-

mental knowledge and skills in the field of testing. Ideally, then, the candidate should obtain a score of 100% in order to successfully pass the examination.

A norm-referenced test, on the other hand, is designed to yield a wide range of scores to permit comparison between the abilities of candidates. The questions are so designed as to measure varied knowledge of differing skills, rather than questioning only those skills essential for ef-

fective performance on the job. The norm-referenced test is measured with the use of a bell-shaped curve, with most of the candidates therefore scoring at the 50% level.

Should the Task Force decide to propose such an examination, and should the National Council delegates approve the proposal, the following steps will have to be undertaken in chronological order: (A) task analysis, or identifying the skills and/or knowledge to perform nuclear medicine procedures; (B) determination of actual examination content; (C) item development, developing of questions and both correct and incorrect (distractors) answers; (D) item analysis, checking that the questions and answers are well phrased (this phase being performed by an outside service); (E) selecting which questions and how many are to be administered in an exam; and (F) determining the pass/fail level.

If the board is approved, its first responsibility will be, based on the task analysis study, the identification

Washington Update

The outcome of the November election may strongly affect both the course of future legislation dealing with health care and the administration of health matters at the federal level.

President-Elect Jimmy Carter, who has made reorganization of the federal bureaucracy a high-priority item for his administration, will after Jan. 20 appoint a new Secretary of HEW as well as new agency heads for FDA, ERDA, the Social Security Administration, and other offices whose functions affect the course of nuclear medicine.

Carter has voiced his support for a system of national health insurance, though he has not come down in favor of any specific legislation thus far proposed.



A number of legislators who had served in key posts on Congressional committees concerned with health legislation went down to defeat on Nov. 2. Prominent among these was Sen. J. Glenn Beall (D-MD), of the Senate Labor and Public Welfare Subcommittee, who had been a prime shaper of the recently passed Health Manpower Bill (see below). Four senators who had served on the Joint Committee on Atomic Energy were also unseated: James L. Buckley (R-NY), Joseph M. Montoya (D-NM), John O. Pastore (D-RI), and John V. Tunney (D-CA).



Legislation affecting nuclear medicine personnel went down to the wire in most cases before being

acted upon by Congress before adjournment on Oct. 1. Some points of interest:

Health Manpower: The Health Professions Educational Assistance Act became law on Oct. 13 after modification by a joint House-Senate committee. Of interest to nuclear medicine technologists is the removal from it, before passage, of provisions contained in the original Senate version dealing with licensing of radiologic personnel. While the Technologist Section took no position on that question, President Mark Muilenburg drafted a letter sent to joint committee members asking that nuclear medicine technologists be understood as not included under the label "radiologic technologist."

Laboratory Personnel and Standards: The Clinical Laboratory Improvement Act failed to come to a vote in the House before adjournment and will have to be reintroduced again next year if it is to become law. CLIA had aroused strong interest among technologists and was the main target of the Section's position paper on the licensure question distributed to legislators and government agency heads during the past several months. CLIA would have increased federal control over most clinical laboratories across the nation, including those doing work in nuclear medicine. In the position paper, the Section recommended "flexible collaboration" among federal agencies, local administrators, and professional groups as superior to imposition of a uniform system of federal regulation for all regions.

of essential knowledge in nuclear medicine technology. Examination content determination and test item development can then follow.

One area discussed in respect to examination content was whether "human factors" should be tested as well. For example, patient-technologist relationships and interactions as well as emergency situations.

As for the board itself, several possibilities for its composition, as well as cooperation with other certifying bodies, were proposed. Although no firm decision has been made, there was a strong feeling that the majority of the members of any board should be members of the Technol-

ogist Section, in keeping with the mandate from the National Council delegates.

Any examination board requires the services of a professional examination organization for its operation. These services include item analysis, item editing, scoring, and computer operation. Several organizations were contacted and the Task Force carefully examined all the proposals. No final decision was made as to which service would be the best, and the matter was deferred for further study.

Let your National Council delegate know your ideas on this matter before the Las Vegas meeting.

SUNY Offers MS for NMTs

If you are a nuclear medicine technologist with a BS degree and are interested in college teaching, the State University of New York at Buffalo is accepting applications for the Master of Science Allied Health Teacher Preparation Program.

The program may be completed in three semesters full time. Applicants may now apply for Spring admissions. Traineeships are available.

To obtain information and forms, write to Health Sciences Education and Evaluation, State University of New York at Buffalo, 260 Winspear Avenue, Buffalo, NY 14214.

SNM Panelists Contribute to Nuclear Medicine Criteria Study

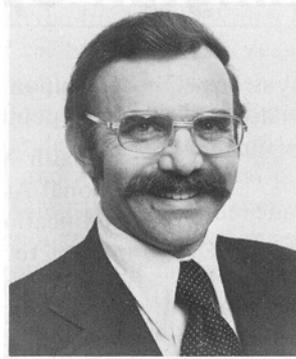
Five SNM members are serving on a panel of eight now helping to set up criteria and standards to be used by local health reviewing agencies in studying the merits of major projects in nuclear medicine proposed by health institutions receiving federal funding.

The five are Howard J. Dworkin, William Beaumont Hospital, Royal Oak, MI; Hirsch Handmaker, Children's Hospital, San Francisco; Leo Lopez, Johns Hopkins Medical Institutions, Baltimore; Barbara J. McNeil, Harvard University; and L. David Wells, University of Kansas Medical Center, Kansas City, KS.

Other members of the panel are Charles Haines, Health Planning Council, Atlanta, GA; Edward Lane, Genessee Region Health Planning Council, Rochester, NY; and Stuart Sessoms, Vice President of Blue Cross/Blue Shield.

Panelists were chosen not only for their knowledge of the field of nuclear medicine technology, but for their collective expertise in administration, finance, and planning. The five SNM participants include both physicians (Drs. Dworkin, Handmaker, and McNeil) and technologists (Messrs. Lopez and Wells).

The panel was enlisted by the Orkand Corporation, of Silver Spring, MD, a management consulting firm under contract to the Bureau of Health Planning and Resource Development (BHPRD), DHEW, to develop guidelines to be used for project review in nuclear medicine as well as three other diagnostic areas: radiology, cardiac catheterization, and clinical laboratory services. Project reviews are mandated by the National Health Planning and Resource Development Act of 1974 for significant structural changes or expenditures planned by any health facility receiving federal funds under Medicare/Medicaid. The reviews are conducted by local Health Systems Agencies (HSAs) in conjunction with State Health Planning and Development Agencies. Already



Dr. Howard J. Dworkin, panelist for the study on nuclear medicine standards and criteria now being completed by the Orkand Corporation. Dr. Dworkin feels the study may have "far-reaching effects."

functioning in many areas, HSAs will ultimately number more than 200 and will operate in all parts of the country.

Nuclear Medicine "projects" that would fall within the scope of HSA review would include such cases as establishment of a new nuclear medicine department or broad expansion of an existing one, or outlay of more than \$100,000 for new equipment.

The working guidelines for project reviews that emerge from the combined efforts of the select panel, Orkand Corporation researchers, and BHPRD planners will be put into circulation as a monograph entitled "Criteria and Standards for Nuclear Medicine Diagnostic Services." This document, now nearing but not yet in final form, will serve as an aid to local planning agencies reviewing prospective expansion of services or purchase of costly equipment in nuclear medicine facilities, but it is not designed to be a system of regulation.

The guidelines will, however, attempt to define the field of nuclear medicine and provide, in a text of less than 100 pages, background on the history of the field as well as current laboratory practices. According to its developers, the monograph will deal with such matters as space and safety considerations, levels of sophistication needed for various types of institutions and population areas,

kinds and training of personnel for small and large services, management structure, and relationship of nuclear medicine services to health institutions as a whole.

Also discussed in some detail will be problems of referrals, quality checking, record keeping, equipment maintenance and monitoring, and cost control.

The present draft is the result of more than a year's work by Orkand research assistants Janis Feldman and Bea Page under Project Manager Charles Eby and Director Elliott Hurwitz and was put together after an extensive examination of the available literature. Preliminary drafts and supporting materials were sent to the eight panel members for critique early this year, and revised copy incorporates their suggestions.

The version now being readied for submission to BHPRD took shape following a meeting of the panel with Orkand personnel Sept. 13-15 in Alexandria, VA, during which specific areas of controversy were aired and mediated.

This version has since been tested under field conditions by an Orkand staff team working with an HSA in Northern Virginia that had just completed a nuclear medicine project review without benefit of guidelines. The reviewing agency, according to Ms. Page, passed favorably on the document's usefulness, concluding that both staff time and expenses could have been reduced by possession of the guidelines at the time of the actual project review.

Once approved by BHPRD, "Criteria and Standards for Nuclear Medicine Diagnostic Services" will be circulated to local HSAs as well as to interested federal agencies such as the Nuclear Regulatory Commission and professional organizations such as the Society of Nuclear Medicine.

The final version is not expected to be ready for distribution for several months, but will be available during the first half of 1977.

VOICE Approves...

The following programs have been approved for PAR credits by the Continuing Education Review Board (CERB) under the VOICE program.

Dec. 7, 1976: Northern Ohio Society of Nuclear Medicine Technologists. The Cloud Room, Cleveland, OH. *Contact:* Constance Pederson, Suburban Community Hospital, Warrensville Heights, OH 44122.

Jan. 25, 1977: Northern Ohio Society of Nuclear Medicine Technologists. Mt. Sinai Hospital, Cleveland, OH. *Contact:* same as above.

The following program has been approved for CEU credits.

Jan. 19-21, 1977: Basic Radioassay in the Clinical Laboratory. College of Georgia University Hospital, Augusta, GA. *Contact:* Wanda M. Hibbard, Dept. of Radiologic Technology, Medical College of Georgia, Augusta, GA 30902.

A new comprehensive booklet detailing the VOICE system is now available from the National Office. The *VOICE Packet* has complete VOICE background information, membership and program applications, and explanations of the different categories of educational credits awarded.

Make sure that your chapter program chairperson has obtained a copy of the *Packet* so that all your programs will receive proper accreditation through VOICE.

Ultrasound Essentials

Mark I. Muilenburg, President of the Technologist Section, is currently representing the Society in its active involvement in drafting an "Essentials" for the rapidly developing field of ultrasound diagnosis.

SNM is just one of many organizations having representation on a special subcommittee of the AMA Council on Medical Education which is charged with developing and setting up a Joint Review Committee on

Ultrasound. The subcommittee has already held one meeting in Washington on Sept. 20, and reviewed two Essentials proposals at that time.

The involvement of the Society stems from a meeting held on June 28 during the annual meeting of the AMA in Dallas. At that meeting, Mark, SNM Executive Director Margaret Glos, and ultrasound specialist Edward V. Staab, of Chapel Hill, NC, met with representatives of other medical organizations in order to establish a subcommittee.

Some of the professional organizations involved in the ultrasound deliberations in addition to SNM were the American College of Radiology, the American Institute of Ultrasound in Medicine, the American Society of Radiologic Technologists, the American Society of Echocardiographers, and the American Society of Ultrasound Technical Specialists.

Though ultrasound technology was recognized as a new medical discipline by the AMA Council on Health Manpower in 1975, in order for ultrasound training programs to be accredited by the AMA's Council on Medical Education, a document detailing essential elements of training programs must be developed.

New ASRT Director

Ward M. Keller was named Executive Director of the American Society of Radiologic Technologists on Sept. 29. An Ad Hoc Search Committee chose Mr. Keller from a crowded field of applicants; his selection was then ratified by ASRT's Board of Directors. Raymond W. Horner, the Chairman of the Board, had served since December 1975.

Mr. Keller was ASRT's Director of Education for the past 2½ years, and for the past year he acted as the Office Manager of ASRT's Chicago office. A Midwesterner, Ward Keller has a bachelor's degree in philosophy; he is a Registered Technologist, and a former Registered Nurse.

The ASRT will hold its third Annual Meeting in Washington, D.C., on June 25-30.

In Vitro Work Hampered by Florida Labs Bill

For the past 1½ years, the technologists of Florida have been shadowboxing with the state health bureaucracy over the status of nuclear medicine technologists working in radioassay laboratories. The Florida Department of Health and Rehabilitative Services has proposed new regulations that would effectively downgrade in vitro NMTs to the level of medical technologists in general.

The issue has remained bottled up in informal and unsatisfactory hearings within the Florida Department of Health. At least four such preliminary hearings have been held, the latest being in Jacksonville on Nov. 9. Recently, a coalition of regional NMT organizations sent a telegram demanding a formal public hearing under the Administrative Procedures Act, which guarantees a neutral and unbiased context for the presentation of expert testimony on significant issues. The Department has been slow to respond.

The contested regulations purport to clarify the present Clinical Laboratory Law. However, the sections dealing with in vitro laboratories include NMTs in the same category as medical technologists in general. The regulations ignore the higher educational standards expected of NMTs and would severely limit their ability to exercise independent judgment in small RIA laboratories. Nuclear medicine technologists now practicing RIA studies would be required to take a statewide certification examination, and interstate reciprocity would be lost.

Acceptance of these regulations would cripple current legislative efforts on the part of the NMTs to define nuclear medicine technology as a distinct specialty within the medical profession. A technologist-sponsored bill narrowly failed to pass the Florida legislature this year. The loss of a separate specialty classification could put NMTs at an economic disadvantage with less-skilled

paramedical workers. Pay scales for in vitro technologists might decline to the level of nonspecialty personnel.

Technologists wishing to learn about more recent developments, especially those who may be faced with similar situations in other states, should contact Donald Ward, Tampa General Hospital, Tampa, FL.

Over 230 Attend 2nd Annual New York State Technologist Meeting

Innovative ideas for the setup of a meeting paid off when over 230 attendees gathered for the Second Annual Symposium of the New York State Society of Nuclear Medicine Technologists (NYSSNMT) in Swan Lake, NY, on Oct. 8-10.

This unusually broad participation at a meeting on the local level was greatly aided by the attractive site and a reasonable registration fee which included all costs, according to outgoing NYSSNMT President Ron Andrews. Low enough so that

it would not be beyond reach to those technologists whose hospitals gave no refunds, the fee included all meals, midnight splash parties, floor shows, tennis, golf, and day-care programs for children, in addition to the scientific program, of course.

Exhibitors' needs were met on two levels. A raffle was held with the prizes being New York State Lottery tickets, but in order to purchase a raffle ticket, a technologist had to obtain a signature from each exhibit booth. This assured that all exhibitors would be visited by the technologists.



Section President Mark Muilenburg addresses attendees at the NYSSNMT Symposium in Swan Lake, NY.

Exhibits were closed when lectures and workshops were given, as attendance at exhibits during those times is very low. Salesmen could attend a session to keep up to date on their medical knowledge or just take a break.

This symposium was the first regional (nonchapter level) meeting to receive CEU credit approval from the VOICE program. A total of 20 hours in continuing education were given.

The NYSSNMT is a brainchild of Ron Andrews, first president of the organization. Close to two years ago he realized the need for a society representing all of the technologists in the state, in view of the mounting problems with licensing and injections. New York is currently divided between the Greater New York Chapter in the South and the Eastern Great Lakes Chapter in the North and West, neither one being able to claim that it fully represents all the technologists in the state.

Norman Olsen, of the Nuclear Medicine Department at St. John's Riverside Hospital, Yonkers, NY, 10701, became this year's president of NYSSNMT at the meeting.

National Office Staff Tours Squibb Medotopes Facility



Staff personnel at the SNM National Office learned first hand how radiopharmaceuticals are produced during tours of the Medotopes facility of E. R. Squibb & Sons, New Brunswick, NJ, on Oct. 20 and 22. Nuclear Medicine Product Manager Joseph Birkbeck (above left) was available to provide the visitors with background and to answer questions, as were Dan Murphy, Squibb's Technical Customer Services Manager, and Tom Anderson, Exhibits Manager. A circuit of the plant was conducted by Hank Bauer, head of the Radiopharmaceuticals Manufacturing Department. Mr. Bauer (above right) was able to hold the interest of SNM staffers Cathy Tulloch (left) and Micki Collins (center).

Bylaws Changes to Be Voted on by Members at Business Meeting in Las Vegas

ATTENTION ALL TECHS! The Bylaws changes printed below were approved by the National Council at its meeting in Dallas this June. On Jan. 28 you will have to decide whether they should be incorporated into the Bylaws.

Bylaws changes may only be incorporated if they are approved by the majority of the general membership at the Business Meeting of the Section. The next Business Meeting will be held on Jan. 28, 1977, from 5:45 p.m. to 6:45 p.m. at the Las Vegas Hilton.

While these proposed Bylaws changes are not really earth shaking, the Bylaws of any organization are vital to its function, and ANY changes should be made only after careful consideration and deliberation by the membership.

Cast your vote in Las Vegas thoughtfully. If you have any concerns or queries about these changes, or about the Bylaws in general, contact Vi Custer, Bylaws Committee Chairperson, at the National Office of the Society, or get in touch with your National Council delegate.

Change No. 1: Article VIII. Committees and Councils—second paragraph.

1. *Standing Committees* are: Add subparagraph h.

"Bylaws Committee: The chairperson and members of this committee are appointed by the President of The Section. The functions of the committee are to: Recommend to the National Council any changes in the Bylaws which they deem necessary, and to present to the National Council any changes proposed by the membership as outlined in Article X."

Change No. 2: Article X. Amendments—delete in its entirety and replace with:

"Article X. Amendments.

1. Any person having membership privileges in The Section may initiate a proposal for amendment to the Bylaws. Such a proposal shall be submitted to the President and Chairperson of the Bylaws Committee in writing. The proposal shall state the desired change, the rationale for the change, and shall include a petition signed by twenty-five members in good standing indicating their concurrence. After validation of the petition, the Chairperson of the Bylaws Committee shall present the

proposal to the National Council at the Annual Meeting of The Section.

2. Proposed changes originating within the Bylaws Committee shall be presented to the National Council at the Annual Meeting of The Section.
3. The National Council shall review all proposals and submit them to the membership in the form of a mail ballot at least sixty days prior to the Annual Meeting of The Society. The ballot must be returned to the Secretary at least thirty days prior to the Annual Meeting of the Society. Ballots postmarked later than thirty days prior to the Annual Meeting of The Society will not be counted.
4. The ballot shall contain: The proposed amendment, the author's name, the rationale for the amendment, and a statement outlining the National Council's stand on the proposal.
5. The Bylaws of The Section may be amended by a two-thirds affirmative vote of the returned ballots.
6. The Bylaws shall be consistent with the Bylaws of The Society."

Our Bylaws specify that members have to be informed of any amendments at least 30 days prior to the Business Meeting. Accordingly, these changes were first published in Vol. 1/No. 1 of the *SNM Newslines* (Sept. 1976).

News from the Chapters

Central Chapter

The fall Central Chapter meeting was held in Madison, WI, on Oct. 9-10. The topic was data processing in nuclear medicine, an assessment of cost and effort versus benefit. Several interesting panel discussions were presented on computer applications in renal, myocardial, and cerebral studies. The Chapter's Technologist Section sponsored a full-day program which concluded with a discussion of the role of the computer in the small hospital.

The Central Chapter Technologist Section, in conjunction with the Chapter, has initiated plans for the third annual series of continuing education programs for nuclear medicine technologists. The programs will again be offered in five or six locations in the Chapter and will begin in early 1977. The theme for this year's program series will be an update of the first annual series with an emphasis on scanning protocols. Coordinators for this year's series will be James Carey and Sylvia Long. Comments, suggestions, and offers to sponsor the program should be directed to them.

The membership committee, under the leadership of President-Elect Lori Shuck, has nearly completed a survey of Central Chapter Technologist Section members who are not listed correctly on our membership list.

Several states in the Chapter have expressed a desire to form state-wide organizations. State-wide meetings have been held in Indiana, Michigan, and Illinois. On July 17 the technologists of Illinois formally organized the Illinois Society of Nuclear Medicine Technologists. At a subsequent meeting in October, bylaws and incorporation papers were completed and approved. The ISNMT will now represent the interests of nuclear medicine technology in the state of Illinois on legislative and licensure

matters. The Society has petitioned the Illinois Radiologic Society to sponsor a meeting of official representatives from all groups concerned with licensure of users of ionizing radiation in Illinois.

The inception of the VOICE program by the Technologist Section has prompted local groups to provide VOICE accredited workshops for their technologists. MAATA is in the process of planning to hold a quality assurance workshop for scintillation cameras in the spring. ATACA presented a two-day registry review workshop on Oct. 30 and Nov. 6 at Rush Presbyterian Medical Center in Chicago.

—Sue Weiss

Greater New York Chapter

The Greater New York Chapter of the Technologist Section is looking forward to the Sixth Annual Spring Symposium. The Program Committee, under the direction of Margie Iannone, has been hard at work since early summer to make this one the best yet. The Howard Johnson Regency Hotel in Atlantic City, NJ, has again been selected as the site. The dates are Mar. 25-26, 1977.

This two-day program will offer something for everyone. Registry review workshops, by now traditional, will again be on the list of events. There will also be discussions on computer applications, how to set up a nuclear medicine department, cardiac-imaging techniques, comparison studies of thyroid imaging with ^{131}I and ^{123}I , and thrombus detection with ^{125}I -labeled fibrinogen. Ultrasound and CT scanning techniques will be demonstrated. An awareness and sensitivity workshop will be featured as well.

Jim Conway, who made a great impression on the technologists at the last Spring Symposium and at the National Meeting in Dallas will

again be the speaker during the plenary session on Friday. Richard Holmes, always in demand as an interesting and dynamic speaker, will be our guest for the plenary session on Saturday. President Mark Muilenburg will be on hand to bring attendees up to date on what is happening in the Technologist Section nationally.

An ice-breaker cocktail party will be held on Friday evening. The festivities will conclude on Saturday evening with the banquet and the installation of the new Chapter officers for next year. Mark your calendars now . . . you won't want to miss this one! Further details may be obtained from Program Chairperson Margie Iannone at (516) 261-4400 (nuclear medicine extension). As an interesting innovation this year, the physicians of the Chapter will hold their own one-day meeting concurrently with the Technologists' Friday session. The Chapter's Technologist Section is happy to host the physicians at this meeting.

A word to Chapter members about the "hot-line," now located in the SNM headquarters. Remember, the "hot-line" was set up as a means to disseminate such information as meetings of the various professional organizations within the Chapter and job openings. Many of our members are using it as an employment service. We ask that you do not leave your name and C.V. as a message when you are looking for a job. However, if there is an opening in your department, DO leave that information. The number is (212) 889-1388. Help make full use of the "hot-line" as it was meant to be used.

—Vi Custer

Hawaii Chapter

The Hawaii Chapter Technologist Section held a meeting on Sept. 7. The meeting was well attended and officers for the upcoming year were elected. Sandra Ashley, of the Honolulu Medical Group, was elected

as president and Katherine Schwenker, of the Straub Clinic and Hospital also in Honolulu, is the National Council delegate. Sandra may be reached at (808) 537-2211 and Kathy at (808) 523-2311.

—*Alvin Leong*

Mideastern Chapter

The Chapter's Technologist Section held its Annual Fall Meeting at the Holiday Inn in Old Town, Alexandria, VA, on Oct. 29 and 30.

The Membership of the Chesapeake Nuclear Medicine Technical Society voted recently to change the name of the organization to the Maryland Association of Nuclear Medicine Technology. The announcement of this change occurred at a crab feast which was enjoyed by all.

The RIA group in this area, officially known as the Clinical Radioassay Society, Washington-Baltimore Chapter, is a very active chapter. They have in the recent month had two well attended symposiums, one on vitamin B₁₂ and folate, the other on radioassay measurement and data handling.

It looks as if the Washington Area Council of Nuclear Medicine Technologist has regrouped and we expect to hear good news from this group in the near future.

—*Charles R. Harrell*

Missouri Valley Chapter

A comprehensive symposium on cardiac imaging was the feature of the Missouri Valley Chapter's annual meeting in Iowa City, IA, Oct. 22-24. The course directors were Drs. James H. Christie, James C. Ehrhardt, and Melvin L. Marcus. The program provided information supporting cardiac imaging as a valuable tool in assisting in the management of cardiac diseases.

The Kansas City Section continued its monthly meetings with a lecture on statistics by Dr. John Prince in August and an informative talk

by Dr. Ben Throne on radiation therapy in September. The average attendance for those institutions represented was 50% higher over the past year.

The South Central Kansas Section initiated its fiscal year with an evening of renewing acquaintances and encouraging new members.

—*Lewis D. Schmidt*

New England Chapter

The New England Chapter had a busy month of October. On Oct. 2, a quality control workshop was held with good attendance. On Oct. 9, a meeting was held in New Hampshire under the auspices of the Catholic Medical Center of Manchester and the New Hampshire Division of the American Cancer Society. A complete program ranging from the basic topics of lung and liver scanning to the new possibilities of myocardial imaging was presented. On Oct. 23-24, a very successful annual Chapter meeting took place in Sturbridge, MA, with over 100 technologists participating.

Our new officers were installed and two bylaw changes were approved at that meeting. The new president is Herta M. Houle, from Union-Truesdale Hospital in Fall River, MA; tel. (617) 679-6405. Lou Izzo, of the University of Vermont at Burlington, is the National Council Delegate, and he may be reached at (802) 656-3455. One bylaw change provided for a student category of membership. The other change added the Continuing Education Committee to the list of Standing Committees. This was felt to be necessary with the VOICE program now in effect.

We are hoping to resume a quarterly newsletter and plans are already underway for the annual spring symposium, which will be held at the Hyannis Sheraton Regal Hotel in Hyannis, MA. Monthly grass roots meetings are still being held in local areas to draw out technologists.

—*Cecile Gaigals*

Northern California Chapter

Northern California technologists ended a productive year with enthusiastic participation in the First Annual Western Regional Meeting held at the Fairmont Hotel, San Francisco, on Oct. 1-3. The Oct. 1 session was organized by technologists and coordinated by Marion Allen, program chairperson, and Elaine Pritchard of the Scientific Program Committee. The program consisted of scintillation camera and radiopharmaceutical quality assurance workshops as well as administrative and human dynamics programs. More than 200 technologists and physicians were in attendance. The remainder of the meeting included technologist-sponsored registry review sessions which were also well supported. Technologists also participated in the scientific program of paper presentations.

Ballot returns for the Section's election of officers were greater than any previous year both in number and in percentage returned. The new president is Paul Tegen, of Mary's Help Hospital in Daly City, and the National Council delegate is Dillu Ashby, of the University of California Medical Center in San Francisco.

—*Bruce G. Borgman*

Pacific Northwest Chapter

The Pacific Northwest Chapter Technologist Section would like to remind all technologists that the Spring 1977 Chapter meeting, which will be held in British Columbia at Harrison Hot Springs on March 25-27, 1977, will be an important one for all of us. Temporary officers were appointed by President Pro-Tem Susan Hemingway until that meeting, and it will be there that a new and first slate of officers will be elected for the coming year. We will also be voting on new bylaws. So please try to attend.

Our first VOICE program, "Quality Assurance of Scintillation Cameras," was held at Swedish Hospital

Medical Center in Seattle on Aug. 21 and was very well attended by 50 or more participants. Shelly Dooling of Swedish Hospital did an outstanding job as program coordinator for the all-day Saturday workshop and our first venture of this kind. Thank you to all!

—Danielle Scudder

Pittsburgh Chapter

The Pittsburgh Chapter held a quarterly meeting Nov. 5 at DuBois, PA. The speaker was Bob Lowdermilk, from the 3M Co., who spoke on thrombus detection and localization—all methods. Refreshments followed the meeting.

The G.E. Seminar held in Pittsburgh was a great success, and the Chapter was commended by a letter from G.E. Medical Systems for their help and input.

The next meeting of the Chapter will be held in March and the speaker will be Charles Rose. Further information concerning the March meeting may be obtained by writing to Chris Woodrum, care of the Nuclear Medicine Department, Bradford Hospital.

—Chris Woodrum

Southeastern Chapter

The 7th Annual Meeting of the Technologist Section of the Southeastern Chapter was held at the Galt House in Louisville, KY, Oct. 13-16, 1976.

The technologists' workshop presented six lectures of special interest to technologists: storage and handling of xenon isotopes, computer applications in clinical nuclear medicine, the superiority of ^{123}I and the pinhole collimator, comprehensive renal function study (CRFS), radiopharmaceutical stabilization, and comparison of Polaroid with 4×5 in. transparency x-ray film. These papers have been included in the continuing education lectures.

The new president is Jennifer Matthews, Self Memorial Hospital, Greenwood, SC; tel. (803) 227-4111, ext. 4194. The National Council delegate is Donald G. Ward, Tampa General Hospital, Tampa, FL; tel. (818) 251-7587.

One of the first committees set up by the president was an ad-hoc committee to draw up a guideline booklet for officers, committees, and council members.

A very successful E.R. Squibb & Sons, Inc., National Nuclear Medicine Seminar was held in Birmingham, AL, at the Hyatt House, Aug. 24-27. There were two full days of in vivo lectures and two days of in vitro lectures and workshops. There was no charge for the participants and all necessary equipment and materials were supplied.

The Ohio Valley Society of Nuclear Medicine Technologists held a cardiopulmonary—resuscitation meeting in the Dayton area in May. Technologists from Dayton, Columbus, Hamilton, and Cincinnati were in attendance. There was a film, followed by a demonstration and discussion of the importance of our knowledge and ability of this procedure. A constitution and bylaws meeting was held Sept. 29 to formalize the group.

—Fran Kontzen

Southern California Chapter

The San Diego segment held their annual SNM potluck picnic and beach party Aug. 28 at Mission Bay.

Computerized axial tomography was the topic of an evening scientific meeting held Sept. 16 at Hollywood Presbyterian Medical Center. Drs. Stephen Graham and John Winter gave an excellent presentation.

The Continuing Education Committee is conducting a 24-week lecture series in radiation physics and nuclear medicine. The ultrasound lecture series is also being offered again this fall. A registry review was held for three consecutive Saturdays starting Oct. 9.

The Arizona Segment held a management seminar Nov. 5 in Phoenix, with Jack Chapman as the speaker.

The Southern California Chapter will hold elections of officers at their business meeting in late October. New revised bylaws will be presented at this time.

We look forward to meeting all of you at the Annual Meeting of the Section in Las Vegas in January.

—Joan L. Herbst

Southwestern Chapter

The Southwestern Chapter has finalized and distributed the long-awaited hot-line information to local representatives in hopes of enhancing communication and alleviating problems with new instrumentation and techniques.

The North Texas Technologist Section will hold a bone symposium in the spring. Details to be announced at a later date.

Elections in the Central Oklahoma Section have placed Ron Lee in the office of president.

Houston presented a very successful thyroid symposium on Sept. 25 and 26. There were 37 registrants and 14 exhibitors in attendance. The symposium covered all aspects of thyroid-related work, even including veterinary nuclear medicine! Nineteen different institutions from Texas were represented, and responses to inquiries indicated that everyone was very pleased with the presentations.

The various nuclear medicine technologist schools within the Chapter are in full swing again. There are two certificate programs presently available in New Orleans. Both are one-year, in-hospital programs and both prepare the participants for the registry examination. Interested parties should contact Dr. George Meckstroth at Charity Hospital of Dr. S.E. Shuler at Alton Ochsner Hospital.

The University of Oklahoma School of Nuclear Medicine Technology graduated nine students in August.

The associate degree nuclear medicine technology program offered at Houston's Community College is very pleased to announce an enrollment of 16 students this fall. The BS program of Houston's St. Luke's Hospital, also in its second year, had seven students participating this fall.

Tremendous amounts of time and energy are expended to create and maintain schools of nuclear medicine. Congratulations and best of luck to all of those dedicated people involved.

—Ann Logan

News from Overseas

Puerto Rico

The Puerto Rico Women's Medical Society and the Section of Nuclear Medicine of the Puerto Rico Medical Association presented, under the directorship of Drs. Lillian Conde de Borrego and Carmen Caballero, a program of nuclear medicine for the practicing physician.

One session was held at the Holiday Inn Hotel in Isla Verde on Aug. 22 and the other at the Oncologic Hospital in Rio Piedras on Aug. 27.

The activity was sponsored by the Division of Continued Medical Education of the University of Puerto Rico School of Medicine. Various topics in nuclear medicine were presented especially for general practitioners and physicians not engaged in nuclear medicine. Both sessions were well attended by physicians and several technologists.

—Rafael Bernabe Prida

Crossword Puzzle

submitted by Chris Woodrum

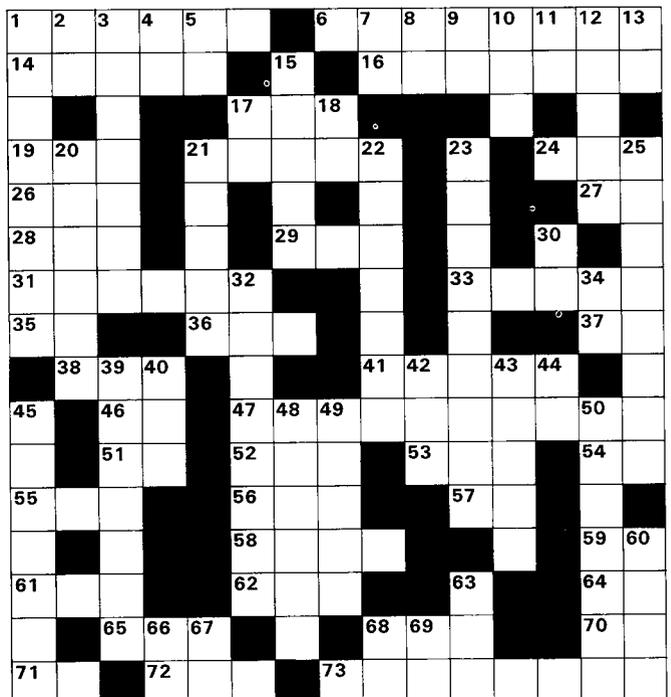
ACROSS

1. positive particle
6. data processor
14. helium atom
16. radiation damage
17. conductance across electrodes
19. automobile
21. reproductive gland
24. charge (abbrev.)
26. a nucleic acid
27. tellurium
28. consume
29. counts after background correction
31. word blindness
33. portion of intestine
35. direction (abbrev.)
36. central venous pressure
37. helium
38. xenon, e.g.
41. healing of wounds
46. ruthenium
47. pertaining to part of kidney
51. antimony
52. atmospheric mixture
53. 2,000 pounds
54. dysprosium
55. relative biologic effectiveness (abbrev.)
56. Dictionary of National Biography (abbrev.)
57. nitrocellulose (abbrev.)
58. restraint
59. sodium
61. ___valent
62. cereal

64. a bovine
65. carcinoembryonic antigen (abbrev.)
68. red blood count (abbrev.)
70. "molly"
71. direct current
72. radiation absorbed dose (abbrev.)
73. curve distribution

DOWN

1. gland
2. right lateral
3. what surgeons do
4. thorium
5. oncotic agent (abbrev.)
7. bone
8. modus operandi (abbrev.)
9. photomultiplier
10. Egypt, officially
11. tuberculin tested (abbrev.)
12. approx. half-life of ¹³¹I
13. Red Cross (abbrev.)
15. "the human computer"
17. audiovisual
18. chromium
20. not digital
21. pertaining to the eye
22. Y
23. iron for nuclear medicine
25. math branch
30. lithium



32. 6.06×10^{23} number
34. umbilical hernia (abbrev.)
39. poison
40. below
42. final
43. weight measure
44. neural lobe (abbrev.)
45. salivary gland
48. straight correlation
49. eye socket
50. glandlike tumor structure
60. efferent process of nerve cell
63. electroconvulsive shock (abbrev.)
66. endoplasmic reticulum (abbrev.)
67. author's alteration (abbrev.)
68. radium
69. blood urea (abbrev.)

Answers to this puzzle will appear in the March 1977 issue of the JNMT (Vol. 5/No. 1). If you have an idea for a puzzle which you think might interest the readers of this Journal, please get in touch with L. David Wells, Scientific Editor.