MEETINGS

The JRCNMT held its semiannual meeting March 23–24, 2001. The Review Committee acted on 10 personnel changes and 7 program changes, considered 6 mid-cycle reports and 4 progress reports from accredited programs, and granted continued accreditation to Salem State College, Salem, MA, for 5 years; Galveston College, Galveston, TX, for 2 years; and University of the Incarnate Word, San Antonio, TX, for 1 year.

The Review Committee will schedule site visits to 17 programs seeking continued accreditation during 2001. A list of programs undergoing review for the year 2002 is appended at the end of this article. Written third-party testimony may be submitted regarding any nuclear medicine technology program undergoing review. Persons desiring to present third-party oral testimony must submit a written request. Third-party testimony, written and oral, must be limited to the educational program's compliance with the Essentials and Guidelines for an Accredited Educational Program for the Nuclear Medicine Technologist.

The fall meeting of the Joint Review Committee on Educational Programs in Nuclear Medicine Technology was held November 2–3, 2001, in Salt Lake City, Utah. No information was available at the time of writing.

WEBSITE

This is a reminder to visit the JRC-NMT website at www.jrcnmt.org. The website contains current information such as *Essentials and Guidelines for an Accredited Educational Program for the Nuclear Medicine Technologist*, a list of accredited programs, the history of the JRCNMT, and "news." The news area features the meeting dates of the Review Committee, policy changes, and a list of programs undergoing review. We would appreciate comments regarding any further infor-

mation you would like to have available on the Web site.

BOARD OF DIRECTORS

A new public member has been elected to the Board of Directors. Dr. Thomas G. Richmond will begin his first term of office beginning with the fall meeting. Dr. Richmond currently serves as an associate professor of chemistry at the University of Utah, Salt Lake City, UT. Dr. Richmond completed his undergraduate studies at Brown University in Providence, RI. Subsequently, he entered and completed the graduate program in chemistry at Northwestern University, Evanston, IL. He has been the recipient of numerous awards including the Robert W. Parry Teaching Award in Chemistry, the American Chemical Society Noble Laureate Signature Award for Graduate Education, the University of Utah Presidential Teaching Scholar Award, and an Alfred P. Sloan Research Fellowship, among many others. His research interests are in inorganic and organometallic chemistry, activation of carbon-heteroatom bonds, organometallic chemistry of fluorine, ligand design and coordination chemistry, transition-metal-based reagents for molecular recognition, environmental chemistry, and chemical edu-

Kristen Waterstram-Rich, MS, CNMT, was appointed to a 3-year term as a representative of the Society of Nuclear Medicine Technologist Section (SNM-TS). Ms. Waterstram-Rich is employed as the program director of the nuclear medicine technology program at the Rochester Institute of Technology, Rochester, NY. She completed her term as president of the SNM-TS in June. As past-president, she is well known throughout the nuclear medicine technology community.

GUIDELINES FOR ELECTRONIC EDUCATION

Several members have requested that the *Guidelines for Electronic Education* be reprinted. Recognizing that educational methodology and delivery is changing rapidly in the current education environment, we are happy to do so.

GUIDELINES FOR ELECTRONIC EDUCATION

The JRCNMT recognizes that the context for learning in our society is undergoing profound changes, some of which are directly related to advances in computer technology and the use of the World Wide Web. Presenting courses on the Web has certain attractions for students and educational institutions. The JRCNMT considers courses presented on the Web (also known as electronic education) as a new teaching technique. Maintaining high standards and quality education is the main concern of the JRCNMT and the reason for evaluating any new teaching technique. The JRCNMT would like to present some guidelines to its participating institutions for consideration. These guidelines are based on the following assumptions and definitions.

Assumptions

- That an electronic education course is provided by institutions that are accredited by a nationally recognized educational accrediting agency and an accrediting agency for nuclear medicine technology.
- That electronic education programs and courses are consistent with the educational mission of the college and/or the university.
- That an institution's programs holding accreditation with the JRCNMT meet the same requirements when offered electronically.
- 4. That it is the institution's responsibility to commit sufficient resources and perform internal review of educational programs it provides electronically. (The review and approval processes should ensure the appropriateness of the technology being

- used to meet the program's objectives.)
- That the course or program being presented electronically provides for appropriate real-time or delayed interaction between faculty and students and among students.
- 6. That qualified faculty provides appropriate oversight of the courses and programs offered electronically. The institution should offer appropriate training and support services to faculties who teach courses and programs electronically.
- That the institution demonstrates a commitment to ongoing support, both financial and technical, and to continuation of the program for a period sufficient to enable students to complete a degree/certificate.
- That the institution evaluates the courses/programs offered electronically for their educational effectiveness, including assessment of student learning outcomes, student retention, and student and faculty satisfaction.
- That the institution provides for ongoing assessment and documentation of student achievement in each course.
- 10. That the institution makes access a fundamental goal when designing online courses. All students should have the equipment and skills necessary to access the course materials.
- 11. That institutions which offer programs in nuclear medicine technology strike a balance between traditional and technology-based delivery, and be prepared to alter the balance over time as the needs and expectations of students change. Some courses require the gaining of competence in a particular skill and should be taught by an instructor.
- 12. That criterion for admission is comparable for students on and off campus.
- 13. That electronic education is an optional mode of instruction.

Nothing in these guidelines shall imply that electronic education is a preferred or required mode of instruction.

Definitions

Electronic education is a teaching method for presenting educational materials over an intranet or internet system for student consumption. Students and teachers do not need to be in the same room at the same time for learning to occur. There are a variety of formats that electronic education can take, and each must be planned and designed with student needs in mind. The following are some examples of distance or electronic teaching:

- Web Page Backup. One of the simpler techniques in electronic education is the placing of course notes, special resource materials, and sample examination questions on a designated Web page for student access. Students may use these materials at their convenience to supplement course materials presented in the classroom setting. These materials are not intended to replace the classroom experience.
- 2. Media Streaming. Allows electronic education instructors to use high-quality audio and video illustrations in their courses. These materials can be posted on the course website. Students should be able to view video illustrations even if they are using a 28.8k modem.
 - Live Video Broadcasts. Instructors can telecast their lectures in one classroom to additional classrooms. These types of electronic techniques should be two-way, thus allowing students at the distance site(s) access to the instructor. In some cases, instructors may be able to capture live video and audio, convert it to a computer-compatible format, and "broadcast" it to multiple users.
- 4. Virtual Course. Instructors place all course materials on a designated website so that a student

can download and proceed at his or her own pace. These courses should allow for student access to the instructor and other students via e-mail and chat rooms.

Guidelines

The following general and specific guidelines are presented for institutional evaluation before placing courses in a long distance or electronic teaching format

General Guidelines

- 1. Clearly define the reasons for instituting an electronic education component in your curriculum.
- 2. Clearly designate who will be responsible for developing and updating the materials to be presented in the electronic format: basic faculty, clinical faculty, technical assistants, or others.
- 3. Clearly designate who will be responsible for the oversight of the electronic courses presented.
- 4. Clearly define the institution's commitment to courses and programs presented electronically. Considerable resources and support personnel are needed for such a project. The institution should define its commitment in terms of funds, equipment, technical support personnel, and technical phone line assistance for the electronic education program. The institution should have a plan to assist students who do not have the resources (equipment or knowledge) to participate in such a program.
- Clearly describe and institute a system of monitoring the participation and achievement of students participating in electronic education.

Specific Guidelines

1. The institution should design specific courses of instruction for a defined student population. An example would be specific electronic courses that supplement a curriculum in nuclear medicine technology. In the case of nuclear

- medicine technology, the institution should not attempt to place every course or the entire curriculum in electronic format. Some courses require the teaching of skills and are best taught face-toface with an instructor.
- Each course being designed for the electronic format should have a specific faculty member assigned who would be solely responsible for its contents. This instructor (or department chairperson) should designate specific technical personnel for assistance.
- All electronic courses should be presented in an interactive mode, thus allowing for student interactions with the instructor and other students. Examples of interactive formats are chat rooms, inter-

- active test practice problems and examinations, and e-mail communications.
- 4. Student examinations should be carefully designed to be interactive and instructive in nature. Students should be able to receive timely feedback from their exam taking.
- Each course instructor should set up and encourage student activity groups in a cohort model of 5–8 students per session.
- Each program that is presented in electronic format should include some component of classroom contact—1 or 2 lectures per course.
- A technical assistance phone line number should be given out to the students to help them with for-

matting and compatibility problems they may have with the course materials.

ACCREDITED PROGRAMS UNDERGOING REVIEW IN 2002

Baptist Health, Little Rock, AR University of Arkansas, Little Rock, AR

University of Miami/Jackson Memorial Medical Center, Miami, FL

Medical College of Georgia, Augusta, GA

Delgado Community College, New Orleans, LA

Bronx Community College, Bronx, NY Central Maine Medical Center, Lewiston, ME

University of Oklahoma, Oklahoma City, OK

Old Dominion University, Norfolk, VA

