



UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE SECRETARY

MAY 6 2002

Mr. Richard Bush
Chairman and Managing Director
American Institute in Taiwan
1700 North Moore Street, #1700
Arlington, VA 22209

Dear Mr. Bush:

I am enclosing a letter from Secretary Rod Paige to the Chairman of the Taiwan Medical Accreditation Council. I would appreciate your forwarding the Secretary's letter to the Chairman at the following address:

Dr. Kun-Yen Huang
Chairman
Taiwan Medical Accreditation Council
National Health Research Institutes
3F, 109, Min-Chuan E. Road, Sec. 6
Taipei 114
Taiwan, R.O.C.

If you have any questions or need further information, please contact Robert Scott of my staff, at (202) 401-3067. Thank you for your assistance in this matter.

Sincerely,

Philip S. Link
Director, Executive Secretariat

Enclosure

ROD PAIGE

MAY 6 2002

Dr. Kun-Yen Huang
Chairman
Taiwan Medical Accreditation Council
National Health Research Institutes
3F, 109, Min-Chuan E. Road, Sec. 6
Taipei 114
Taiwan, R.O.C.

Dear Dr. Huang:

At the March 1, 2002 meeting of the National Committee on Foreign Medical Education and Accreditation (NCFMEA), the NCFMEA reviewed the information most recently provided by the Taiwan Medical Accreditation Council (TMAC) in order to reconsider the comparability of Taiwan's standards to the standards used to evaluate programs leading to the M.D. degree in the United States. The NCFMEA members wish to thank Dr. Monto Ho and you for attending the meeting to provide additional information regarding the status of medical accreditation activities in Taiwan.

Based on the most recent information and materials received from Taiwan, the NCFMEA determined that the current accreditation standards used by TMAC to evaluate medical schools in Taiwan are comparable to the standards used to evaluate programs leading to the M.D. degree in the United States (U.S.). This determination of comparability by the NCFMEA has a maximum duration of six years from the date of this letter, unless the Committee withdraws, extends or renews its determination prior to that date. Before expiration of the six-year period, the NCFMEA will seek to confirm that your standards and procedures for accrediting medical schools in Taiwan are still comparable to the accreditation standards applied to medical schools in the U.S. If so, its previous determination of comparability will be extended for another period.

In an effort to keep apprised of the accreditation activities of TMAC, the NCFMEA has requested that one or two of its members observe a TMAC accreditation review of one of Taiwan's medical schools. In addition, the NCFMEA has requested that TMAC submit a report on its accreditation activities for review at the September 2003 NCFMEA meeting. The purpose of the report is to provide the NCFMEA with a summary of accreditation activities, including the following information:

- *Overview of accreditation activities:* A summary of key activities by the TMAC during the period covering March 2002 - June 2003, such as accreditation reviews conducted, accreditation decisions reached, accreditation conferences or training sessions held.

- *Laws and Regulations:* An indication as to whether there were any changes during March 2002 – June 2003 in Taiwan's laws or regulations affecting the accreditation of your medical schools, and if so, what those changes were.
- *Standards, Processes and Procedures:* An indication as to whether there were any changes during March 2002 – June 2003 in the accreditation standards, processes or procedures that TMAC uses to evaluate and accredit medical schools, and if so, what those changes were.
- *Schedule of upcoming accreditation activities:* A listing of accreditation meetings and listing of on-site visits to medical schools and clinical clerkship sites planned for July 2003 – June 2004.

Please send the report by July 1, 2003, to the Executive Director of the NCFMEA at the address below:

Ms. Bonnie L. LeBold
Executive Director, NCFMEA
U.S. Department of Education
1990 K Street, NW – Room 7007
Washington, D.C. 20006-7563
U.S.A.

The Executive Director will contact you later this year to discuss arrangements for NCFMEA members to observe a TMAC accreditation review. In the interim, if you have any questions, please do not hesitate to contact Ms. LeBold at (202) 219-7009 (telephone), (202) 219-7008 (fax), or Bonnie.LeBold@ed.gov (e-mail).

As a result of the determination of continued comparability by the NCFMEA, any medical school in Taiwan that is accredited or approved by TMAC may apply to the U.S. Department of Education to participate in the Federal Family Education Loan (FFEL) program. If a medical school's application is approved, students enrolled in the school who are either U.S. citizens or permanent residents of the U.S. may receive FFEL loans to finance their medical education if they meet all other eligibility requirements. Medical schools that wish to participate in the FFEL program may obtain the proper application forms from the Foreign Schools Team by calling (202) 377-3168 or by writing to the following address:

Foreign Schools Team
FSA/Schools Channel/CMO
U.S. Department of Education
Room 73C3
830 First St., NE
Washington, DC 20202-5340
U.S.A.

Page 3 – Dr. Kun-Yen Huang

Thank you very much for providing information regarding Taiwan's accreditation of its medical schools. The NCFMEA members and I appreciate your ongoing assistance in this matter.

Sincerely,

Rod Paige

U.S. Department of Education



**Staff Analysis
of the
Standards Used by**

Taiwan

For the Evaluation of Medical Schools

March 1, 2002

**U.S. Department of Education
Staff Analysis
of the Standards Used by**

**Taiwan
for the evaluation of Medical Schools**

Prepared February 2002

Background

At its September 1996 meeting, the National Committee on Foreign Medical Education and Accreditation (NCFMEA) made a determination that Taiwan's standards for the evaluation of its medical schools were not comparable to those used in the United States. This determination was based solely on the fact that Taiwan had not submitted sufficient information about its standards.

Taiwan subsequently submitted additional materials regarding its medical schools, and appeared before the NCFMEA again at its October 1998 meeting. Although Taiwan's Ministry of Education (MOE) did provide some information and documentation regarding the medical programs provided by the country's medical schools, it did not provide any information on the standards or processes it used to evaluate the medical schools.

There was evidence to suggest that students were receiving a quality education in medical colleges, and there was documentation to show that the Ministry had conducted at least one review of the medical schools and had made recommendations for improvement. However, the information was insufficient for the Committee to determine that Taiwan had an accreditation/approval process that was comparable to that used to accredit medical schools located in the United States.

According to documentation submitted by Taiwan in December 2001, NCFMEA's October 1998 decision marked "a very important turning point for medical education in Taiwan." As a result of the Committee's findings, a member of the delegation that had attended the NCFMEA meeting submitted a report on the Committee's decision and a proposal to completely overhaul the process of accrediting Taiwan's medical schools to MOE in November 1998. In December 1998 MOE called a meeting of the deans of all ten of the then existing medical schools to consider the proposal, which was accepted. (Note: There are now eleven medical schools in Taiwan.)

The recommended approach consisted of two phases. Phase 1 was a planning phase, during which an eleven-member Planning Committee was to be established, and was to

last approximately three months. Phase 2 was to be the implementation phase, to be continued indefinitely.

The Planning Committee was established in July 1999 and was tasked with formulating the structure of the new accrediting body, defining its function and its relationship to MOE, and establishing standards of accreditation. The Planning Committee completed its work in September 1999, and the entire plan for the new accreditation process was then reviewed and agreed upon by the Deans' Conference.

The Planning Committee called for the establishment of a new accrediting body, the Taiwan Medical Accreditation Council (TMAC), to function independently of MOE. TMAC's initial five-year budget was to be provided by MOE in the form of a contribution. The approval of this contribution took several months, so the establishment of TMAC was delayed until July 2000. Information about the newly established TMAC and its progress in evaluating medical schools in Taiwan is incorporated into the staff analysis that follows.

Introduction: A Brief History of Accreditation in Taiwan

Since 1975, MOE had been using separate accreditation systems for various schools and departments, which were conducted on an irregular basis. Article 4 of Taiwan's *University Law* stipulated that "the general direction and focus of development of each university may be decided by the individual institution according to the national requirements and the school's characteristics, pending approval and assessment by MOE." Article 2 of the *University Law Details for Implementation* specified that "the assessment of the general direction and focus of collegiate development by each university... shall be carried out by the accreditation council formed by the Ministry of Education." This emphasized the importance of MOE's collegiate accreditation tasks.

In 1997, MOE gathered professionals to discuss the work relating to the accreditation of colleges and universities in Taiwan. This led to a test program for the institutional accreditation of universities and the planning of programmatic accreditation of specific departments in the same academic year. At a time when calls for reform in the educational systems in Taiwan were already high, and "efforts to strengthen the assessment of collegiate education still in its infant stages" the 1998 NCFMEA criticism was taken as a crisis that could be "converted to a turning point."

As a result, MOE commissioned the non-profit National Health Research Institutes (NHRI) to develop a new medical accreditation system in 1999. The eleven-member Planning Committee operated under its aegis. TMAC was then established by NHRI upon the Planning Committee's recommendation. Concurring with the move, MOE decided that a similar accreditation system could likely be used for all universities and colleges in Taiwan. As a result, the work on medical education accreditation has been

used to initiate a review of the entire higher education system and bring it to an international level.

Summary of Findings

Based on information provided by Taiwan in written documents, Department staff concludes that the system being developed by Taiwan has some aspects that are comparable to the system used in the United States. However, the system also has some features that are different from those used in the U.S.

TMAC has developed a set of criteria for the evaluation of medical schools in Taiwan. Overall, the standards are rather general. However, many of the areas that would normally be addressed in detail in an agency's standards are subject to governmental regulation in Taiwan. The government has very specific requirements in many of these areas, and they are not subject to TMAC control.

TMAC has developed a review process based on the typical American model. Schools will prepare a self-study. A review team will be chosen from a site visitor pool and will review the self study, then conduct a typical onsite visit using a specified format and the agency's criteria. The team will then submit a report to TMAC for review and an accrediting decision. While the process is comparable to that used in the United States, there is a concern in that the agency has stated that conflict of interest will be an ongoing problem in choosing qualified onsite reviewers.

TMAC was developed under the authority of the Ministry of Education, through the non-profit commission, NHRI. It appears that TMAC in essence operates as the accrediting body for MOE, although it has been stated that the council is an independent agency and that MOE has not interfered in its operation. MOE was already conducting accreditation visits to schools prior to the formation of TMAC, but was not conducting these visits on a regular basis. One of the primary benefits of TMAC's establishment appears to be that medical school evaluation will now be conducted on a regularly scheduled rotation.

TMAC is still in its infancy. The council was developed in 1999 and began reviewing schools in 2000. During that time, three of the "better" schools in the Taipei area were targeted for the first round of evaluation. There are currently eleven medical schools in Taiwan, including one newly established school that has not yet graduated a class and is engaged in TMAC's pre-accreditation process, which involves yearly reviews until the time that the first class graduates. TMAC has not yet had time to evaluate all of the medical schools in Taiwan, including those that by its own estimation are not the "better" schools.

Staff Analysis

The National Committee on Foreign Medical Education and Accreditation is charged with determining whether the standards of accreditation used by a foreign country to accredit medical schools offering programs leading to the M.D. (or equivalent) degree are comparable to standards of accreditation applied to M.D. programs in the United States.

In making this determination, the Committee uses the following guidelines that it has determined provide an appropriate framework for the thorough evaluation of medical schools offering programs leading to the M.D. (or equivalent) degree. In general, these guidelines are similar to, and based upon, the standards used by the Liaison Committee on Medical Education (LCME) to accredit medical schools in the United States. The Committee wishes to make clear, however, that these are in fact guidelines and that a foreign country's standards and evaluation processes can differ substantially from these guidelines and the LCME standards and still be determined to be comparable to the standards used in the United States, provided the foreign country can demonstrate that its standards and processes are effective alternatives to those used in the United States.

These guidelines were adopted by the National Committee on Foreign Medical Education and Accreditation at its September 15, 1999 meeting and became effective at the conclusion of that meeting.

PART I: The Entity Responsible for the Accreditation/Approval of Medical Schools

There should be a clearly designated body responsible for evaluating the quality of medical education in the foreign country, and that body should have clear authority to accredit/approve medical schools in the country that offer educational programs leading to the M.D. (or equivalent) degree.

MOE commissioned the non-profit National Health Research Institutes (NHRI) to establish an "independent and neutral accreditation committee" to plan and implement matters relating to the accreditation of medical education. As a result, NHRI established the Taiwan Medical Accreditation Council (TMAC) as the body responsible for medical education accreditation in Taiwan. Accrediting authority was officially conferred on TMAC by MOE, with agreement by the deans of Taiwan's medical schools, and took place on December 16, 1998. MOE has funded TMAC's initial five-year budget through a grant. The project has been funded from August 1, 2000 through July 31, 2005.

Although TMAC is reportedly acting as an independent accrediting body, it should be noted that schools are nonetheless receiving their accreditation reports from MOE, not directly from TMAC. It should also be noted that NHRI, as TMAC's parent organization, must obtain MOE's approval for project execution, must transfer the copyrights of all reports and other works to MOE, must agree to give detailed explanations regarding any aspect of the project to MOE, and must allow third parties to have access to any data upon MOE's request.

The documentation also states that the accreditation of medical education has currently been commissioned to NHRI, but adds that it "will soon be incorporated into the work of the collegiate accreditation council of MOE's Academic Review Board."

Documentation:

Answers to Questions of ED NCFMEA, p.1

Appendix 1: Minutes of the Deans' Conference

Appendix 2: Accreditation Result Letter by MOE

Appendix 3: Letter on Budgetary Contribution and Agreement to Set UP TMAC

Appendix 5: TMAC Guidelines for the Accreditation of Medical Schools, p.2

PART II: Accreditation/Approval Standards

The entity within the foreign country that is responsible for evaluating the quality of medical education in the country and has authority to accredit/approve medical schools should have standards comparable to the following:

1. Mission and Objectives

(a) The educational mission of the medical school must serve the general public interest, and its educational objectives must support the mission. The medical school's educational program must be appropriate in light of the mission and objectives of the school.

(b) An essential objective of a program of medical education leading to the M.D. (or equivalent) degree must be to prepare graduates to enter and complete graduate medical education, qualify for licensure, provide competent medical care, and have the educational background necessary for continued learning.

The TMAC Guidelines require that medical schools should stipulate goals and objectives in a clear and concrete manner and fully explain them to their students and faculty.

The TMAC Guidelines specify that:

- the responsibility of the medical school lies in careful selection of its students and the provision of medical education in the hope that the students will be certified and become competent physicians
- it is important that medical students be provided with general university curricula during their first two years of school in order to foster basic knowledge, creative thinking, and maturity
- the curriculum should instill an attitude of lifelong learning
- the curriculum should develop a sense of professional dedication and compassion

The documentation states that "The mission of medical education is to produce a new generation of compassionate and competent health care providers for the general public." It also notes that "The fundamental mission of the medical education institution, regardless of whether the education is conducted in a public fund- or private fund-supported school, is to provide the nation with well-rounded and clinically competent doctors."

Documentation:

Answers to Questions of ED NCFMEA, pp. 2-3
Appendix 5: TMAC Guidelines, pp. 18-19, 21

2. Governance

(a) The medical school must be legally authorized to provide a program of medical education in the country in which it is located.

(b) There must be an appropriate accountability of the management of the medical school to an ultimate responsible authority external to and independent of the school's administration. This external authority must have sufficient understanding of the medical program to develop policies in the interest of both the medical school and the public.

Any organization or individual planning to establish a medical school must submit a plan that is evaluated by several government agencies, including the Department of Health and the Council for Economic Planning and Development. The plan is then evaluated by the Committee for Medical Education, which is a standing committee within MOE. TMAC was invited to submit its view on a recent application. When an application is approved, MOE is the entity that authorizes or licenses the medical school. This authority is vested in MOE by the *University Law*.

MOE sets minimum standards for medical schools, including student enrollment methods, quality of faculty, content of the educational program, method of periodic evaluation of students' learning outcomes, and physical facilities. MOE also requires that a medical school have a directly attached hospital for students' clinical studies.

MOE dispatches inspectors to each school each year to monitor the effectiveness of each school's program. It is stated that this inspection is reinforced by the more in-depth and independent evaluation conducted by TMAC.

Documentation:

Answers to Questions of ED NCFMEA: pp. 3-5

Appendix 4: University Law, Articles 13, 14,

Appendix 5: TMAC Guidelines, pp. 20-23

Appendix 17: Procedure of Setting Up Schools

3. Administration

(a) The administration of the medical school must be effective and appropriate in light of the school's mission and objectives.

(i) There must be sufficient administrative personnel to ensure the effective administration of admissions, student affairs, academic affairs, hospital and other health facility relationships, business and planning, and the other administrative functions that the medical school performs.

(ii) The chief academic officer of the medical school must have sufficient authority provided by the Institution to administer the educational program. That individual must also have ready access to the university president or other university official charged with final responsibility for the school, and to other university officials as are necessary to fulfill the responsibilities of the chief academic officer's office.

(iii) In affiliated institutions, the medical school's department heads and senior clinical faculty members must have authority consistent with their responsibility for the instruction of students.

(b) The chief academic official of the medical school must be qualified by education and experience to provide leadership in medical education.

As part of the major medical reform in higher education in Taiwan, all medical schools have now become part of universities. The administrative organization and arrangements of human resources are regulated by the *University Law* and its associated rules and regulations.

All medical schools in Taiwan have a dean, who is the chief academic official. The method of selecting the dean is left to the faculty senate or assembly to decide. Setting

up a search committee for the purpose is mandatory. The candidates must hold the rank of full professor in a medically related field and have considerable academic achievements.

The dean can appoint a number of assisting officials as needed, but all medical schools have associate or assistant deans of academic affairs, student affairs, and development or administrative affairs who are appointed from the faculty body. The teaching hospital has a separate director. The government has laws governing the employment of educators that include fairly rigid stipulations on the qualifications of school staff. A school's organization chart must be approved by the MOE at the time that the school is established.

Documentation:

Answers to Questions of ED NCFMEA, pp. 5-7

Appendix 4: University Law

Appendix 7: Statute for Employment of Educator

Appendix 17: Procedure of Setting Up Schools

(c) The medical school may determine the administrative structure that best suits its mission and objectives, but that structure must ensure that the faculty is appropriately involved in decisions related to--

(i) Admissions;

(ii) Hiring, retention, promotion, and discipline of faculty; and

(iii) All phases of the curriculum, including the clinical education portion;

As stated previously, the administrative structure of a medical school is set at the time that it is established and must be approved by MOE. However, TMAC requires all medical schools to have Admissions Committees made up entirely of medical school faculty members. Matters related to the hiring, retention, promotion, and discipline of faculty, as well as curriculum are handled by three-tier committees elected by the faculty body.

Answers to Questions of ED NCFMEA: pp. 7-8

Appendix 4: University Law, Chapter 4

Appendix 9: Rules of Qualification for Teaching at Higher Education

Appendix 10: New Method of College Student Recruitment

Appendix 11: Teachers Law

(d) If some components of the educational program are conducted at sites that are geographically separated from the main campus of the medical school, the school must have appropriate mechanisms in place to ensure that--

(i) The educational experiences at all geographically separated sites are comparable in quality to those at the main campus; and

(ii) There is consistency in student evaluations at all sites.

This section is not applicable. Schools are not allowed to have branch campuses, and this is not expected to change. The TMAC Guidelines also discourage this practice.

Documentation:

Answers to Questions of ED NCFMEA, p. 8

Appendix 5: TMAC Guidelines: p. 34

4. Educational Program

(a) *Duration:* The program of education leading to the M.D. (or equivalent) degree must include at least 130 weeks of instruction, scheduled over a minimum of four calendar years.

There are two types of medical education programs in Taiwan. Seven-year programs accept high school graduates. Five-year programs accept only college graduates. There are currently eleven medical schools in Taiwan. One school runs the two types of programs concurrently. All of the other ten schools run only seven-year programs. Taiwan uses the credit-hour system. The seven-year programs require two years (72 weeks) of intensive undergraduate pre-med education. Both the five-year and seven-year programs require 144 weeks (four years) of biomedical and clinical education, plus an additional 50 weeks (one year) of internship. Therefore, the five-year programs are 190 weeks in duration, and the seven-year programs require an additional 72 weeks of pre-med education.

Documentation:

Answers to Questions of ED NFCMEA, pp. 8-9

(b) *Curricular Content:* The medical school's curriculum must provide students with general professional education, i.e. the knowledge and skills necessary to become a qualified physician. At a minimum, the curriculum must provide education in the following:

(i) The sciences basic to medicine, including--

(A) The contemporary content of those expanded disciplines that have traditionally been titled anatomy, biochemistry, physiology, microbiology and immunology, pathology, pharmacology and therapeutics, and preventive medicine; and

(B) Laboratory or other practical exercises that facilitate the ability to make accurate quantitative observations of biomedical phenomena and critical analyses of data.

MOE, with the recommendation of the Committee on Medical Education and in consultation with the Medical School Deans' Conference, sets the required basic sciences courses. The courses include anatomy, histology, embryology, biochemistry, microbiology, immunology, genetics, physiology, pharmacology, pathology (including clinical pathology), public health, and epidemiology. All of these courses have concurrent laboratory exercises, including more such exercises than at some American schools, it is stated. It is noted that in gross anatomy, dissection by the students is still required. The narrative states that while each medical school's educational program used to require MOE's approval, MOE has agreed "in principle" to transfer this authority to TMAC henceforth.

Documentation:

Answers to Questions of ED NCFMEA, pp. 9-10

Appendix 13: NCKU Schedule of Classes

(ii) A variety of clinical subjects, including at least the core subjects of internal medicine, obstetrics and gynecology, pediatrics, surgery, and psychiatry and, preferably, family medicine.

Note 1: Medical schools that do not require clinical experience in one or another of the above disciplines must ensure that their students possess the knowledge and clinical abilities to enter any field of graduate medical education.

Note 2: Clinical instruction must cover all organ systems and include aspects of acute, chronic, continuing, preventive, and rehabilitative care.

Note 3: The medical school's program of clinical instruction must be designed to equip students with the knowledge,

skills, attitudes, and behaviors necessary for further training in the practice of medicine.

Note 4: Instruction and experience in patient care must be provided in both ambulatory and hospital settings.

Note 5: Each required clinical clerkship (or equivalent) must allow the student to undertake thorough study of a series of selected patients having the major and common types of disease problems represented in the clerkship.

The narrative states that all of the listed major areas of clinical sciences are covered in Taiwan's medical schools. In addition, areas such as orthopedic surgery, ophthalmology, ENT, diagnostic imaging, physical medicine and rehabilitation, dermatology, and radiation therapy are also included in the list of required courses. These disciplines are all included on Taiwan's National Board examination. These teaching programs must also go through MOE's approval process. This authority is also in the process of being transferred to TMAC.

Documentation:

Answers to Questions of ED NCFMEA: p. 10

Appendix 13: NCKU Schedule of Classes

(iii) Disciplines that support the fundamental clinical subjects, such as diagnostic imaging and clinical pathology.

(iv) Ethical, behavioral, and socioeconomic subjects pertinent to medicine.

(v) Communications skills integral to the education and effective function of physicians, including communication with patients, families, colleagues, and other health professionals.

Again, these requirements are decided by MOE in general terms. However, the medical schools develop their own versions of educational programs in these areas. It is stated that courses related to ethics, behavioral, and socioeconomic subjects are interlaced with requirements for students to spend a set amount of time with patients. The students then bring their observations back to the class for discussion.

The TMAC Guidelines state that the curriculum should place an emphasis on diagnostic sciences such as medical imaging and pathology. The guidelines state that the cultivation of communication skills is an indispensable link in medical education that not only enhances medical efficacy but also helps prevent malpractice disputes. The

guidelines state that medical schools should evaluate students' aptitude in this area, including communication with patients, patients' families, colleagues, nurses, and hospital staff.

Documentation:

Answers to Questions by ED NCFMEA, pp. 10-11

Appendix 5: TMAC Guidelines, pp. 28, 31

Appendix 13: NCKU Schedule of Classes

(c) *Design, Implementation, and Evaluation:*

(i) There must be integrated responsibility by faculty within the medical school for the design, implementation, and periodic evaluation of all aspects of the curriculum, including both basic sciences and clinical education.

(ii) The medical school must regularly evaluate the effectiveness of its medical program by documenting the achievement of its students and graduates in verifiable ways that show the extent to which institutional and program purposes are met. The school should use a variety of measures to evaluate program quality, such as data on student performance, academic progress and graduation, acceptance into residency programs, and postgraduate performance; the licensure of graduates, particularly in relation to any national norms; and any other measures that are appropriate and valid in light of the school's mission and objectives.

MOE sets the requirements for the educational program in general terms. Each medical school is then responsible for designing, implementing, and evaluating the effectiveness of the program. All medical schools have a curriculum committee, many of them with student representatives. Most schools also have subject subcommittees. Each medical school now has its own outside review committee to oversee the quality of the medical education program. The narrative states that the ultimate authority in evaluating the quality of medical education is now vested in TMAC.

The TMAC guidelines related to evaluation of the students' academic performance specify that:

- Students' learning performances should be evaluated in an objective and reasonable manner.
- Examinations should measure the comprehensiveness of the program.
- Faculty should ascertain the learning objectives and standards expected of the students, and reflect these in examinations.

- The number and frequency of examinations should be coordinated and regulated to avoid overburdening students with heavy course loads.
- Examinations should guide the students in logical elaboration and self-learning, rather than rote memorization.
- The same evaluation system should be present at all teaching hospitals.
- Students' grades should be kept confidential.

Documentation:

Answers to Questions of ED NCFMEA, p. 12

Appendix 5: TMAC Guidelines, pp. 30-31

5. Medical Students

(a) Admissions, Recruiting, and Publications

- (i) The medical school must admit only those new and transfer students who possess the intelligence, integrity, and personal and emotional characteristics that are generally perceived as necessary to become effective physicians.
- (ii) A medical school's publications, advertising, and student recruitment must present a balanced and accurate representation of the mission and objectives of its educational program. Its catalog (or equivalent document) must provide an accurate description of the school, its educational program, its admissions requirements for students (both new and transfer), the criteria it uses to determine that a student is making satisfactory academic progress in the medical program, and its requirements for the award of the M.D. degree (or equivalent).

A new admissions method was introduced in 1993. Students who are recommended by their high school teachers take a test similar to the MCAT, which includes Chinese, English, mathematics, social sciences, and natural sciences. An interview has become an essential component of the admissions procedure. Within this general framework, each school is free to set its own additional admissions standards. These standards must be published in a public brochure one year in advance. It is stated that TMAC will closely monitor the admissions standard of every school.

The TMAC guidelines require that:

- The task of student recruitment should be collectively conducted by an Admissions Committee.
- The committee should use interviews to investigate student aptitude.

- Recruitment should be conducted according to predetermined standards without prejudices against gender, region, or individual background.
- Guidelines concerning transfer students should be made according to the regulations set by MOE.
- Medical schools should publish pamphlets or brochures to introduce a school's objectives and operating concepts and provide a concise description of the school facilities, curriculum design, and recruitment methods.

Documentation:

Answers to Questions of ED NCFMEA, pp. 12-13

Appendix 5: TMAC Guidelines, p. 32

(iii) Unless prohibited by law, student records must be available for review by the student and an opportunity provided to challenge their accuracy. Applicable law must govern the confidentiality of student records.

The confidentiality of student records is protected under the *Computer Processed Personal Data Protection Law*. The TMAC Guidelines require that student grades should be kept strictly confidential.

Documentation:

Answers to Questions of ED NCFMEA, p. 13

Appendix 5: TMAC Guidelines, p. 31

Appendix 15: Computer Processed Personal Data Protection Law

(b) *Evaluation of Student Achievement*

(i) The medical school faculty must establish principles and methods for the evaluation of student achievement, including the criteria for satisfactory academic progress and the requirements for graduation.

(ii) The medical school's evaluation of student achievement must employ a variety of measures of student knowledge, competence, and performance, systematically and sequentially applied throughout the medical program, including the clinical clerkships.

The method of evaluating student achievement is left largely for the medical schools to develop. MOE gives the school only general principles in this area. The mainstay of the evaluation method is the written exam. Depending upon the type of courses, different techniques may be used, including observation, discussion, and reports or

papers that are written. Taiwan has a National Board Examination that all medical school graduates are required to take.

Documentation:

Answers to Questions of ED NCFMEA, pp. 13-14

Appendix 5: TMAC Guidelines, pp. 30-31

Appendix 6: Sample of Schedule of National Board Examination, 2001

- (iii) **The medical school must carefully monitor the progress of students throughout their educational program, including each course and clinical clerkship, must promote only those who make satisfactory academic progress, and must graduate only those students who successfully complete the program.**

The TMAC Guidelines state that examinations should "include evaluation of the progress in their clinical skills, attitudes, and suitability for the profession." Examinations should measure the comprehensiveness of the program and should progress in a "step-wise fashion." Students should not only be graded, but teachers should be able to pinpoint deficiencies in the students' learning attitudes and analyzing abilities and provide suggestions for improvement. It is stated that this method is crucial during the clinical learning phase.

Documentation:

Appendix 5: TMAC Guidelines, pp. 30-31

(c) Student Services

Students must have access to preventive and therapeutic health services, including confidential mental health counseling. Policies must include education, prevention, and management of exposure to infectious diseases during the course of the educational program.

According to the narrative, medical schools provide student services that are listed in their Student Handbooks, which are distributed to students when they are admitted or are available at any time from the school administration. Some student services are required by MOE, while some services are provided at the discretion of the individual school.

All schools are required to have a student counseling service to help with students' academic and non-academic problems. An Associate Dean of Student Services is a mandatory position. It is stated that the intensity of the student advisory system varies from school to school.

Taiwan has universal health insurance for its citizens. Medical students are covered by this system and also have additional insurance to cover injuries on campus. Medical students entering the clinical phase are subjected to serological screening to protect against infectious diseases and receive vaccinations at school cost.

The TMAC Guidelines specify that:

- Screening should be set up to identify students' learning problems.
- Students should be assigned counselors who work closely with the curriculum coordinator.
- Faculty should guide students in career planning.
- Attention should be given to the vaccination status of students.
- The special needs of students, including color blindness, motor disability, psychological disorders, and other diseases should be taken into account.
- Schools should take care of the personal safety of the students and staff.
- Comprehensive consideration should be given to the protection of the overall environment, laboratory safety, and health protection.

Documentation:

Answers to Questions of ED NCFMEA, pp. 14-15

Appendix 5: TMAC Guidelines, pp. 31-33

6. Resources for the Educational Program

(a) *Finances:* The medical school must have adequate financial resources for the size and scope of its educational program.

The TMAC Guidelines specify that:

- Funding should come from a variety of sources, for example tuition and fees, donations, research grants and subsidies, funding allocations, and additional government funding.
- Schools should not sacrifice teaching quality due to a funding shortage.
- Schools should not over-recruit students and exceed their ability to provide a good medical education.

Documentation:

Appendix 5: TMAC Guidelines, pp. 33-34

(b) *Facilities:*

(i) The medical school must have, or be assured use of, physical facilities and equipment, including clinical teaching facilities, that are

quantitatively and qualitatively adequate for the size and scope of the educational program, as well as the size of the student body.

(ii) The medical school should be encouraged to conduct biomedical research and must provide facilities for the humane care of animals when animals are used in teaching and research.

MOE lays down the minimum requirements for medical schools in its *Procedure of Setting up a School*. This document stipulates the financial resources. MOE periodically appropriates money to improve the teaching facilities of both public and private medical schools. In 1995, the MOE spent approximately \$40,000,000 (US) to "renew and improve the teaching facilities of all medical schools according to individual needs." Schools can also raise "soft money" for their own use. Research animals should be handled humanely, according to the *Animal Protection Act*.

Documentation:

Answers to Questions of ED NCFMEA, pp. 15-16

Appendix 17: Procedure of Setting Up Schools

Appendix 18: Private Medical School Subvented List, 1998-2000

Appendix 19: Animal Protection Act

(c) Faculty:

(i) Members of the medical school's faculty must be appropriately qualified to teach in a medical program leading to the M.D. (or equivalent) degree and effective in their teaching. The faculty must be of sufficient size, breadth, and depth to provide the scope of the educational program offered.

(ii) The medical school should have policies that deal with circumstances in which the private interests of its faculty or staff may conflict with their official responsibilities.

The size of the faculty at a public school is determined by MOE, since faculty members are considered to be government employees. The restriction is less rigid with private schools. The standards of the teachers to be hired are set by the school. New appointments, as well as promotions, must go through a three-tier committee review. MOE's Council of Academic Review and Evaluation has the authority to determine the ranking of any teacher hired by any higher education institution. Teacher certification is issued by MOE. When faculty are promoted, they are issued new certificates.

The TMAC Guidelines specify that:

- Good teachers should have a solid knowledge background, be familiar with methods of teaching and evaluation, and be able to inspire their students with perseverance and wise guidance.
- Teachers and school administrators should be familiar with methods of student evaluation.
- Medical schools should consider the development potential of faculty recruits.
- Faculty should be distributed proportionately across the medical fields.
- Each instructor should be knowledgeable in a specialty field and also in a secondary field.
- There should be clear policies regarding recruitment, contract renewal, promotion, and dismissal of faculty.
- Allocation of the specialty and sub-specialty areas should be based on volume of patient services, volume of teaching, teaching load of residents, and capacity for continued education.
- Accomplished physicians practicing in local clinics or hospitals may be appointed as part-time faculty, in accordance with the *University Law*.
- Faculty members should be subject to an annual review.
- A comprehensive code of ethical conduct should be drawn up by the school.

Documentation:

Answers to Questions of ED NCFMEA, pp. 16-17

Appendix 5: TMAC Guidelines, pp. 34-36

Appendix 11: Teachers Law

- (c) ***Library:*** The medical school must have a library sufficient in size, breadth, and depth to support the educational program and adequately and professionally staffed.

All medical schools have a medical library. It is stated that the medical libraries in general are well stocked with medical books and journals, mostly in English. The average number of medical journals is 1,000. The libraries are also well equipped with computers directly linked with *Medline* for literature searches.

The TMAC Guidelines specify that:

- Medical schools should have a well-managed and properly catalogued library.
- There should be a collection of publications and periodicals sufficient to support the school's teaching and research.
- Students and other users should be familiar with the library's use, functions, and resources.
- The curricula should encourage use of the library.
- The library should be managed by a professional staff.
- Help should be made available to students for accessing library resources.
- Part of the library should support the local medical profession.

Documentation:

Answers to Questions of ED NCFMEA, p. 17

Appendix 5: TMAC Guidelines, p. 37

(e) *Clinical Teaching Facilities* The medical school should have affiliation agreements with each teaching hospital or clinical facility it uses that define the responsibilities of each party.

When a medical school is established, it must have a teaching hospital of its own. These hospitals are directly under the control of the medical school. These hospitals range in size from 500-2,500 beds. These hospitals must undergo separate accreditation to qualify as teaching hospitals. TMAC is beginning to become involved in the assessment of the teaching programs of these hospitals to ensure that they have good residency training programs.

The TMAC Guidelines specify that:

- Affiliate or teaching hospitals should have both out-patient and in-patient facilities.
- Clinical teaching should be conducted under the guidance of a medical school committee.
- Teaching hospitals should undergo accreditation by the appropriate authorities.
- Hospitals involved in clinical education should have resident physicians and a comprehensive resident teaching system.
- The number of hospital beds should be maintained at a given level to allow clerks to see a given number of new patients each week.
- Teaching hospitals should have libraries with reading space and conference rooms.
- There should be a written contract between the medical school and the hospital outlining responsibilities for teaching and research.

Documentation:

Answers to Questions of ED NCFMEA, pp. 17-18

Appendix 5: TMAC Guidelines, pp. 37-38

PART III: Accreditation/Approval Processes and Procedures

The entity within the foreign country that is responsible for evaluating the quality of medical education in the country and has authority to accredit/approve medical schools should have processes and procedures for granting accreditation/approval to medical schools that are comparable to the following:

1. Site Visit

The accreditation/approval process must include a thorough on-site review of the school (and all its geographically separated sites, if any) during which sufficient information is collected to determine if the school is in fact operating in compliance with the accreditation/approval standards. This review should include, among other things, an analysis of the admission process, the curriculum, the qualifications of the faculty, the achievement of students and graduates, the facilities available to medical students (including the training facilities), and the academic support resources available to students.

TMAC has begun a program of site visits. Three schools have been visited thus far. The narrative states that the visits last four days and include a review of the admissions process, curriculum, faculty, achievement of students and graduates, the facilities, and the academic support services. The topics that are reviewed are covered in the TMAC Guidelines.

Documentation:

Answers to Questions of ED NCFMEA, p. 18

Appendix 5: TMAC Guidelines, pp. 14-15, 18-38

2. Qualified On-Site Evaluators, Decision-Makers, and Policy-Makers

The accreditation/approval process must use competent and knowledgeable individuals, qualified by experience and training in the basic or clinical sciences, responsible for the on-site evaluation, policy-making, and decision-making.

The TMAC site evaluators are all senior educators in medical or related fields. They have demonstrated ability to recognize excellence in the operation of medical schools, and especially in the educational program. The narrative states that they are "known to be men of vision."

The TMAC Guidelines specify that:

- Site evaluation team members are mainly trained professionals in the field of medical education.
- Non-medical experts may be included on teams in special circumstances.
- Site teams should consist of at least nine members.
- Two overseas Chinese experts must be included on the team.
- Teams should include examiners from various regions.
- Teams should include both public and private school representation.

- Examiners work under contract to TMAC, and tenure concludes after the team presents its report.
- Examiners must take part in an orientation briefing.
- Examiners who have a conflict of interest may be reassigned.
- The site visit process is monitored and evaluated by the TMAC chairman.

TMAC serves as the policy and decision-making body for medical education accreditation in Taiwan. There are eleven members of TMAC, who serve three-year terms. Five members are recommended by NHRI, three by MOE, and three are elected through the Conference of the Deans of Public and Private Medical Schools. The chairman is elected by the TMAC members. TMAC members must be experienced in medical education, far-sighted and unbiased, and capable of making fair assessments of all medical schools. The Council may include scholars in basic medical sciences, the humanities, or foreign academics. The Council is assisted by an administrative staff. Council members meet three times per year.

Documentation:

Answers to Questions of ED NCFMEA, pp. 18-19

Appendix 5: TMAC Guidelines, pp. 6-10

3. Re-evaluation and Monitoring

The accreditation/approval process must provide for the regular reevaluation of accredited/approved medical schools in order to verify that they continue to comply with the approval standards. The process must also provide for the monitoring of medical schools throughout any period of accreditation/approval granted to verify their continued compliance with the standards.

TMAC originally set a period of five to seven years for fully accredited status, but that period is more likely to be for six to seven years. All medical schools that have been visited must file annual reports. The report should highlight improvements during the past academic year and concentrate on how deficiencies identified during the TMAC site visit have been corrected. If necessary after the initial assessment, a follow-up visit may be undertaken in two years. Improvements reported on the annual reports will not lead the TMAC to cancel such a follow-up visit. Newly established medical schools must undergo a small-scale annual assessment until the first class graduates. If the annual assessments are satisfactory, at that point the school can begin undergoing accreditation on a normal schedule.

Documentation:

Answers to Questions of ED NCFMEA, pp. 19-20

Appendix 5: TMAC Guidelines, pp. 8-11

4. Substantive Change

The accreditation/approval process must require medical schools to notify the appropriate authority of any substantive change to their educational program, student body, or resources and must provide for a review of the substantive change by the appropriate authority to determine if the school remains in compliance with the standards.

Prior to the establishment of TMAC, medical schools were required to submit the plan of any substantive changes to MOE for advance approval. MOE's standing Committee on Medical Education was to be consulted on these matters. These matters are now in the process of being transferred to TMAC for consultation and evaluation. Any switch in the teaching model is considered a substantive change and is to be under intense TMAC scrutiny.

The TMAC Guidelines specify that the accreditation council should be notified of any major reforms adopted in the curriculum of a medical school. TMAC will review the relevancy of the reform to determine if a site visit is needed. If this is necessary and cannot be scheduled as part of a routine visit, a special site visit will be undertaken.

Documentation:

Answers to Questions of ED NCFMEA, p. 20

Appendix 5: TMAC Guidelines, p. 30

5. Controls against Conflicts of Interest and Inconsistent Application of Standards

The accreditation/approval process must include effective controls against conflicts of interest and inconsistent application of the accreditation/approval standards.

According to the narrative, this topic "was an important issue that led to a long debate at the Planning Committee meetings among the committee members." It is stated that LCME's conflict of interest policies will be very hard to enforce in Taiwan, since it is a small island and the medical community is closely interconnected. Further complicating the issue is the fact that until the 1950s, Taiwan had only one medical school, National Taiwan University School of Medicine. Many of the more senior and accomplished medical academicians are graduates of this one school.

TMAC has specified in its guidelines that no faculty member of a school will be allowed to assess his or her own school. The narrative states that TMAC will avoid, to the best

of its ability, choosing an alumnus to become a member of an assessment team for his alma mater. Anyone who has a consulting job is also disqualified from serving on an assessment team for that school, as well.

That said, the narrative notes that during the first round of assessment for Taiwan National University School of Medicine, the team leader was a graduate of that school, as were a "fair number" of the team members. It also notes that the final assessment report on that school was passed without major revision.

Documentation:

Answers to Questions of ED NCFMEA, pp. 21-211
Appendix 5: TMAC Guidelines, pp. 8, 14

6. Accrediting/Approval Decisions

The accreditation/approval process must ensure that all accreditation/approval decisions are based on the accreditation/approval standards. It must also ensure that the decisions are based, in part, on an evaluation of the performance of students after graduation from the medical school.

The TMAC Guidelines specify that council members meet three times year. Included in their duties is the responsibility to "audit the report by the on-site evaluation team, make the final conclusion, and submit that decision to MOE."

Regarding the performance of graduates, Taiwan does not have an independent organization equivalent to the United States' National Board of Medical Examiners. Taiwan does have a national board type of examination that all medical school graduates must take in order to be licensed. The authority for this exam is vested in a special branch of the executive wing of the government. It is stated that there has been controversy over the years regarding the quality of the questions on the exam, and that test scores fluctuate widely from year to year. As a result of this problem, TMAC has not tried to set benchmark passing rates, although they state that the pass rate is taken into consideration. It is unlikely that benchmarks will be set until TMAC deems that the results of the exam have become more stabilized and consistent.

Documentation:

Answers to Questions of ED NCFMEA, pp. 22-23
Appendix 5: TMAC Guidelines, p. 9



NEWDOC

Committee Name 3	Year yyy	Meeting Summer(s)-Winter(w)
NCFMEA	2002	S (W)

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01 Agenda

Country Materials for 56

Enter country-code number from the Master List.

21 Staff Analysis

23 Agency Response

24 Addendum

29 Secretary's Decision Letter

02 Decision Memo

04 Federal Register Notices

05 General Correspondence

06 Handouts

07 Minutes

08 Readers/Recusals

09 State Department Notice

10 Transcripts

Date

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30 By-Laws

62 Appointment Letters

64 Membership Lists

66 Guidelines

68 Miscellaneous

*Country
Response
to draft
Staff
Analysis*

Greathouse, Robin

From: ¶À±XÁÉ [kunyaen@nhri.org.tw]
Sent: Thursday, February 14, 2002 9:08
To: Greathouse, Robin
Subject: Re:

Dear Ms. Griffiths:

I just received your e-mail communication of February 15, 2004, after Chinese New Year's break of several days. I have read the accompanying analysis of how the business of medical school accreditation has evolved and what its status is in Taiwan. I find no major errors in your analysis, that will require my answer at this moment. If your committee members have any questions, I am prepared to answer them in person on March 1, 2002. Wish you a Happy Year of the Horse!

Sincerely yours,

Kun-yen Huang, M.D., Ph.D.
Chairman, TMAC



NEWDOC

Committee Name 3	Year yyy	Meeting Summer(s)-Winter(w)
NCFMEA	2002	S (W)

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01 Agenda

Country Materials for 56

Enter country-code number from the Master List.

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Country Submission

Date - -
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30 By-Laws

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- 68 Miscellaneous

醫學院評鑑委員會
National Health Research Institutes
Taiwan Medical Accreditation Council
台北市內湖區 114 民權東路六段一〇九號三樓
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TEL: 886-2-2653-4401 FAX:886-2-8792-5571

Ms. Bonnie L. LeBold
Executive Director, NCFMEA
U.S. Dept. of Education
1990 K St. NW
Washington, D.C. 20006-7563

Dear Ms. LeBold:

I am sending you the materials related to the medical school accreditation in Taiwan for your committee to review.

These materials consist of three parts. One: a summary of events or changes that have taken place in Taiwan since 1998. I am sure this summary will facilitate your committee members to grasp the whole picture. Two: answers to your questions. They are lined up according to the order you have listed them in the sheets you gave me before. Some points in my judgment needed special emphasis were painted in boldface. Three: the collection of supporting documents. They are all numbered according to the order in which they appear. Some specific supporting pieces of information have been cited in the list.

There is one exception though. In order to show the quality our accreditation, we include the report on National Taiwan University College of Medicine as a sample. The translation of this document into English language has taken a little longer time than expected, and to date it has been completed. Please allow me to send it after the holiday break as I am flying to Mountain View, California tomorrow. This report is listed as No. 12 document. If any additional material is needed, please let us know as soon as possible.

I will call you from California, perhaps even before the materials reach you.

Have a Merry Christmas and Happy New Year

Yours sincerely,



Yvonne Ai, Executive Assistant, TMAC
for Kun-Yen Huang, M.D., Ph.D.
Chairman, Taiwan Medical Accreditation Council

**Summary of Events Leading
to the Present Status of
Medical School
Accreditation in Taiwan**

Taiwan Medical Accreditation Council

Summary of Events Leading to the Present Status of Medical School Accreditation in Taiwan

October 8, 1998 marks a very important turning point for medical education in Taiwan. That day, the Founding Dean of National Cheng Kung University College of Medicine, Kun-yen Huang, MD, Ph.D., led a delegation of three medical educators from Taiwan to answer the questions of National Committee on Foreign Medical Education and Accreditation (NCFMEA) regarding the nature of medical school accreditation in Taiwan. Several key deficiencies according to the Committee's standards were found and Taiwan's medical school accreditation was determined to be "not comparable" at the time. This determination touched off a series of actions aimed at establishing a new and effective method of accreditation, taken at the initiative of the delegation upon its return to Taiwan.

A report on that mission and a proposal to completely overhaul the process of accrediting medical schools were drafted by Dr. Huang and submitted to the Ministry of Education (MOE) in late November 1998. On December 16, 1998 a meeting was called by the MOE of deans of all existing ten medical schools to consider the recommendation, which after deliberation was accepted as proposed.

The recommended approach consisted of two major phases. Phase 1 was the planning phase, during which an eleven-member Planning Committee was to be established. The tasks of the Committee were to draw the blue print of the structure of the accreditation body to be newly established, to define its function and its relationship to the MOE, and to draft the standards of accreditation. This phase of the work was to be completed in three months upon the approval of the budget, and the report submitted to the MOE, which would in turn call a Deans' Conference meeting to consider its acceptability to medical schools. If the results of the Planning Committee were accepted, the new accreditation body would be established and the accreditation of all medical schools would begin according to the developed scheme. This latter phase of action would constitute what we call the Phase 2, which will in essence continue indefinitely.

The proposed plan was accepted in its entirety by the MOE and the Planning Committee was organized and inaugurated on July 1, 1999. The Committee completed its work by the end of September. The entire plan for the new accreditation process was then reviewed and agreed upon by the Deans' Conference. According to

the approved plan, the new accreditation body, which functions totally independent of MOE, is called Taiwan Medical Accreditation Council (TMAC). The first five years' budget of TMAC is provided by MOE in the form of a contribution. The approval of this contribution took several months so that the establishment of TMAC was delayed until July 1, 2000.

The Council is located within National Health Research Institutes (NHRI) with two administrative assistants. The eleven members of TMAC are chosen and recommended from three constituencies: five members are recommended by NHRI, three by Deans' Conference and the remaining three by MOE. The Council meets three times a year to discuss, develop and decide on major policies and related matters regarding medical school accreditation. These details are all spelt out in the accompanying TMAC publication, Guideline for the Accreditation of Medical Schools (Appendix 5), which has been disseminated among all medical schools. The current Chairman of the Council is Dr. Kun-yen Huang, who was Professor of Microbiology and Medicine at the George Washington University Medical School for twenty years until he came back in 1982 to Tainan, Taiwan to found and serve as its first Dean of the medical school now known as National Cheng Kung University College of Medicine.

At its first meeting in September 2000, TMAC decided to conduct the first round of accreditation visits beginning the second week of April 2001. Four schools were selected. They were Chang Gung University College of Medicine, National Taiwan University College of Medicine, National Yang-Ming University School of Medicine, and Fu Jen Catholic University College of Medicine. (The Fu Jen Catholic University College of Medicine is newly established in July 2000 and, therefore, will be visited every year until the first class of students is graduated). Each school to be assessed was allowed a six-month period to complete self-evaluation, for which TMAC has a defined format. It was distributed to the school selected for assessment in September 2000, requiring the schools to return it to TMAC in early March 2001.

According to the process of accreditation, it is mandatory for each member of TMAC to participate in the assessment of at least one school each year. Since each assessment team consists of at least nine members and, therefore, non-TMAC members have to be chosen from a pool of medical educators who are willing to contribute time to do the work. TMAC has built a pool with more than seventy individuals, a number quite adequate for the current need. Our new process also stipulates that each assessment team has to have two overseas professors. Thus, a fair

number of experienced medical school professors, mostly of North American medical schools, is included in the pool. In order to facilitate communications during the assessment, these overseas assessment members are all required to be proficient in Chinese language. Unlike those recruited from the domestic institutions, they are asked to visit three schools instead of only one. For the Year 2001 assessment, we had Professor Ray Chiu, Chairman of Cardiothoracic Surgery, McGill University Medical School, Montreal, Canada, and Rucy J. Sung, Professor of Medicine, Stanford University School of Medicine, Palo Alto, California. In putting together the assessment team for each school, care is taken to make sure that the special interests of assessment team members can adequately cover all aspects of medical school operation.

A training and organizing session for assessment team members was conducted on March 29, 2001. TMAC even prepared a small booklet listing important issues to be looked into with special attention. Each assessment member was assigned with the responsibility of a specific area, such as teaching of basic sciences, administration, etc. for special attention. When an assessment member is writing the report, the assigned area becomes its center of gravity of his report though he is not limited to contribute his opinions within that particular area.

Several areas, especially in regard to teaching, received special emphases and their importance was stressed. To list just a few:

- Humanities, ethics and general education
- Communications and decision-making skills
- Reading and writing skills (English)
- Socio-behavioral awareness and sensitivity
- Clinical relevance of basic biomedical sciences teaching materials
- Responsibilities of students on the floor during the clinical years
- Evaluation of students' clinical skills
- The effectiveness of committee systems overseeing the quality of education

Special attention is paid to determine how much the school visited is trying to make students aware of the major local medicosocial problems. Of particular importance among these problems is the abuse of antibiotics, which has resulted in an alarmingly high rate of antimicrobial resistance of common pathogenic bacteria. The resurgence of tuberculosis and medical problems caused by child abuse are other areas TMAC considers to deserve special emphasis.

TMAC also developed a unique method of looking into the quality of education. Each school to be visited is asked to submit a complete schedule of teaching activities that will take place on Thursday, including clinical conferences requiring students to attend, not to mention all didactic lectures or small group discussions. Since the assessment of a school begins on a Monday and lasts for four days, this means Thursday is the last day. On this day, each assessment team member is free to attend any number of conferences or lectures of their choice in order to observe and evaluate teaching in action. TMAC may change this activity from Thursday to some other days in the next round of accreditation. The assessment activities on other three days consists briefings by the school officers, question and answers, clarifications and discussion, and site visit, covering all areas of administration, resources, teaching and student counseling, etc. Student and faculty interviews are an integral part of accreditation. At the end of the day, before the dinner the assessment team again gathers in the hotel to discuss the day's results and findings and compare each other's notes.

The Year 2001 assessment was conducted according the following schedule:
Chang Gung University College of Medicine, April 9 through Thursday, April 12
National Yang-Ming University School of Medicine, April 16 through April 19
National Tuiwan University College of Medicine, April 23 through April 26
Fu-Jen Catholic University College of Medicine, May 14

Each assessment team member is asked to write up the draft of evaluation results and critiques, and hand it over to his team leader, who in turn has to organize the reports into one complete draft and submit it to TMAC office by mid July. The final drafts are reviewed, discussed and revisions made, where necessary. Complete and final reports for all school visited were sent to MOE in August

This year, TMAC found none of the four medical schools evaluated in this round of assessment measured up in all aspects to the expectation of TMAC. Some inadequacies were common to all schools while others were more specific to a particular school. Therefore, all schools received "accredited with conditions attached." Each school will be revisited by a small assessment team within one or two years, depending on the gravity of the deficiency. Of particular concern was the newly established Fu-Jen Catholic University College of Medicine. This school is facing serious problems in the recruitment of faculty, development of curriculum and, most

importantly, financial resources. TMAC may have to take a drastic step after the next round of visitation if the conditions are not improved. The problems of National Taiwan University, which is regarded as the best medical school in Taiwan, are much more minor. All problems detected by TMAC assessment teams were pointed in unmistakable terms in the report.

The report of National Taiwan University College of Medicine was translated into English and included as a supporting document (Appendix 12) for your reference.

On October 17, 2001 MOE convened a special meeting inviting TMAC to brief on the entire process of accreditation of the four schools. MOE thereupon decided to send the reports to the respective school with deadline set for the school to explain or rebut. Otherwise the opinions and actions recommended by TMAC will stand and the entire reports will be put on the computer network for public scrutiny and consumption. If any school is found to be less effective in rectifying the deficiency in the educational program, which the school failed to explain to the MOE or TMAC's satisfaction, the school may face reduced budgetary assistance until satisfactory remedial measures are taken. From the intelligence collected by TMAC so far, all indications are that the school evaluated in 2001 are taking TMAC's reports very seriously and changes are brought about to improve their program.

The plan to place the accreditation report on the website has a special significance in Taiwan at this juncture. The old system of standardized, written examination that all students have to sit for in order to get into a college has been abolished as of 2001. The replacing new mechanism of entering a college is not unlike those operative in the US. In other words, students are to go through the SAT-, or MCAT-like tests for that matter, and apply for the college of their choice. Each school will have to set the acceptance standard and conduct interview of applicants who have passed the initial scrutiny. Students thus need accurate and fair information on the strengths and weaknesses of each school for them to decide on which school to apply for. We believe TMAC's assessment reports will serve as an important medium of information for students.

Another important indicator of TMAC's success and impact on the medical education in Taiwan is the seriousness with which the schools selected for assessment in 2002 are getting ready for the event. TMAC's medical school accreditation process is essentially the product of mixing the essence taken from the US and Australian

system and the local thoughts on education, cultural factors and social needs to make it workable and effective in keeping and improving the quality of medical education in Taiwan. In order to bring the system of accreditation process to perfection, TMAC's Chairman, Dr. Huang, participated as a guest assessment member in the accreditation of University of Western Australia in Perth, conducted by Australian Medical Council July 26 through 30, 1999. In addition, two additional current members of TMAC have participated in some activities of LCME.

In closing this summary report on the new phase of quality control of medical education in Taiwan, it must be stressed that this major reformation in medical school accreditation, although triggered by the event of October 8, 1998, is not as much to answer the critiques of NCFMEA as to promote the quality of medical education in Taiwan to a higher level. Our efforts caught the attention of Hong Kong Council on Academic Accreditation, which as a result requested us to accept a delegation of three, including its Chairman, Professor John C. Y. Leong, its Executive Director, Miss Wong Wai Sum and a member, Professor Mary Ip, who is also an Assistant Dean of University of Hong Kong Medical School, as observers to join the assessment teams to visit National Taiwan University College of Medicine and National Yang-Ming University School of Medicine. They were allowed to ask questions and actively took part in the discussion. This gave our first round of medical school accreditation a distinct international perspective.

**Answers to Questions of
U.S. Department of Education
National Committee on
Foreign Medical Education and
Accreditation**

Taiwan Medical Accreditation Council

**Answers to Questions of U.S Department of Education
National Committee
on
Foreign Medical Education and Accreditation**

Part I: The Entity Responsible for the Accreditation/Approval of Medical Schools

Question: *What is the name of the entity responsible for evaluating the quality of medical education in your country?*

Answer: Taiwan Medical Accreditation Council (TMAC).

Question: *By what authority does this entity accredit or approve medical schools?*

Answer: When the proposal to develop a new system of medical accreditation made by the current Chairman of TMAC (see accompanying summary), he had to maneuver through the bureaucratic channels so that obstacles that might kill the proposal could be avoided. The plan, therefore, was handed over to the Ministry of Education (MOE). MOE then according to our proposal convened a meeting of deans of all the medical schools of Taiwan to consider the entire plan. Authority as spelled out in the proposal, therefore, was conferred to TMAC by MOE and the entire medical educational community of Taiwan at this conference (see Appendix 1), which took place on December 16, 1998. None of the medical societies was consulted on the matter of structuring TMAC, because all medical societies in Taiwan have increasingly become arenas of factional infightings, and, if allowed to involve would not only increase to difficulties but also tarnish the image and the prestige of TMAC.

Documentation: Minutes of the Deans' Conference called by MOE on 12/16/1998 (Appendix 1) , Accreditation Result Official Letter by MOE (Appendix 2) , Official Letter on Budgetary Contribution and Agreement to Set Up TMAC signed between MOE and NHRI (Appendix 3)

Part II: Accreditation/Approval Standards

1. Mission and Objectives

Question: What are your country's requirements related to the educational mission of medical schools in your country? How does the mission serve the general public interests?

Answer: The program of medical education in Taiwan was switched from Japanese to the one similar to that of the US in the late 1940s when Japan pulled out of the island at the end of World War II. The system of Duke University Medical School was taken as the model, modified to suit the local tradition and philosophy of educational program. This unique system has evolved further since. However, the educational mission of the medical school has not undergone drastic changes. The mission of medical education is to produce new generation of compassionate and competent health care providers for the general public. A high school graduate enrolled in a medical school has to go through two years of very highly compressed general college education with strong premed character. After that, a student has to go through four years of medical education, which consisted of approximately one and half years of basic biomedical sciences courses and approximately two and half years of clinical education, namely, clerkship. That stage completed, students have to spend a year as one rotating intern before they receive. In order to obtain the license as a physician, graduates of medical schools have to take the national board examination within two years of graduation.

The fundamental mission of the medical educational institution, regardless of whether the education is conducted in a public fund- or private fund-supported school, is to provide the nation with well-rounded and clinically competent doctors. We believe the efforts of medical schools here in Taiwan serve the general public interest very well.

Question: What are your country's requirements related to how medical schools must prepare graduates to qualify for licensure and to provide competent medical care?

Answer: MOE and Department of Health (DOH) had been until the establishment of

TMAC the government agencies responsible for preparing medical graduates to become competent health care providers. Now the quality of the program is under the scrutiny of TMAC (see Appendix 5 Chapter 2, Part 5,III IV). MOE sets the general standards for medical schools, which cover the students enrollment methods, quality of faculty, the content of educational program, the method of periodical evaluation of students' learning outcomes, physical facilities and others. MOE also requires that a medical school have a directly attached hospital for students' clinical teaching. These standards are only the minimum and medical schools are given the autonomy to come up with innovative programs (see Appendix 4, Chapters 4,5). To give an example, many medical schools stipulate that students have to pass all basic science courses before they can go on to the clerkship years. MOE dispatches inspectors to each school each year to monitor the effectiveness of each school's program. This inspection now is reinforced by a much more in-depth and independent evaluation conducted by TMAC. The graduates have to pass the National Board Examination (Appendix 6) administered by a different agency of the government in order to be licensed to provide general health care. Additionally, DOH oversees the residency training program leading to specialist Qualification. The authority of licensing specialists is delegated to respective medical societies. System of recertification is also operative in Taiwan.

These efforts are consistent with the mission of medical schools and quite effective.

Documentation: University Law(Appendix 4) , TMAC Guideline for the Accreditation of Medical Schools(Appendix 5) , Sample of Schedule of National Board Examination, 2001 (Appendix 6)

2.Governance

Question: What are your country's requirements related to authorization or licensure of medical schools in your country? Are they required to be legally authorized or licensed in order to provide a program of medical education in your country? If so, what is the name of the entity that authorizes or licenses medical schools?

Answer: Any organization or individual who plans to establish a medical school has

to submit a plan. The plan then goes through a string of very stringent evaluations. To begin with, DOH and Council for Economic Planning and Development, both of which are charged with the planning of manpower needs in various fields have to be consulted. These agencies have set the current ceiling of the number of physicians to be graduated per year in Taiwan at 1,300. A recent tally that is deemed very accurate has put the number of students enrolled this year at 1,340. Unless there are drastic changes in the population size and demographical profile in Taiwan, this number will stand for some time making it practically impossible for a new medical school to come to being. If an application warrants further evaluation for some reason, it has to go through a close scrutiny by an ad hoc committee set up by MOE, in which the Committee for Medical Education, a standing committee within MOE, plays a very critical role. In a recent reviewing of an application by the Changhwa Christian Hospital, However, TMAC was invited to contribute its views. The ad hoc Committee will go through by a set of standards required for setting a new medical school, which was already indicated in the answer to preceding question. This set of rules covers a wide range of aspects of medical schools, such as specific mission of the school, financial resources plan, strategy of recruitment of teachers and students, plan to develop balanced curriculum, plan for the attached hospital, etc. When an application is approved, the entity that authorizes or licenses a medical school is the MOE. This authority to license medical school is clearly vested in the University Law (see Appendix 4, Chapter 2, Articles 3.4, Chapter 3, 13.14, Chapter4, 20) and Procedure of Setting Up Schools (Appendix 17, Articles 4.6)

.Documentation: University Law(Appendix 4) · Procedure of Setting Up Schools (Appendix 17)

Question: What are your country's requirements related to the accountability of the management of a medical school to some authority external to the medical school? Is there such an external authority? If so, what is that authority?

Answer: The accountability of the management of medical school used to lie primarily in the MOE. MOE annually dispatches so called inspector groups to the schools to look into various aspects of medical school operation. Large-scale accreditation-inspection used to be conducted by MOE, albeit not at regular intervals before TMAC came to being. In recent years, all medical schools are asked to

organize and conduct their own third party evaluations. Private schools by law are required to have a Board of Trustees to oversee the operation of the school. According to the newly revised University Law yet has to be passed by the legislature, it will become mandatory also for public fund-supported schools to have a Board of Trustees. TMAC now has become the ultimate body to keep the quality of medical education offered by each school accountable.

Documentation: University Law (Appendix 4, Chapter 3, Articles 13.14)

3. Administration

Question: *What are your country's requirements regarding how medical schools are to be administered?*

Answer: The way medical schools have to be operated are clearly stipulated in the University Law. It must be stressed, however, that up until three years ago, except for National Taiwan University College of Medicine and National Cheng Kung University College of Medicine, all other medical schools in Taiwan were independent colleges belonging to no university campus. From its very outset, TMAC has strongly recommended that ideally a medical school should be part of a university. As part of the major reform in higher education in Taiwan, all medical schools now have become a part of universities.

The administrative organization and arrangements of human resources to ensure adequate and strong logistic support to run the educational program are also regulated by the University Law (Appendix 4, Chapter 3) and related rules and regulations (e.g., Chapter 3, Article 28 of Statute for Employment of Educator). However, medical schools have fair amount of freedom to decide on the administrative structure as they see fit. A dean, who is the chief academic official of a medical school, can appoint a number of assisting officials as needed. All medical schools in Taiwan have associate or assistant deans of academic affairs, student affairs, development or administrative affairs, who are all appointed from the faculty body holding professorial title. The teaching hospital has a separate director, called superintendent in Taiwan. National Cheng Kung University has a Vice President for Medical Affairs, who is also the dean of its College of Medicine. The University Law

(Appendix 4 Chapter 4, Articles 18.19.20.21) and Statute for Employment of Educators (Appendix 7, Chapter 2, Articles 9.10.11) have a fairly rigid stipulation on the qualification of staff members a school hires. What happens in actual practice is that at the time of the establishment of a medical school, the school authority has to develop the table of organization in which what type of person will occupy what kind of position, the chain of command, etc. have to be drafted and submitted to MOE for approval. Taiwan has a fairly rigid system of classifying various human resources by an examination. This practice has its historical background and is a deep-rooted tradition. Private schools have greater flexibility in deciding the number of employees they hire and determining their salary but the qualification and fitness of an employee to the assigned position also have to be evaluated by MOE.

Documentation: University Law(Appendix 4) , Statute for Employment of Educator (Appendix 7)

Question: *What are the qualifications your country requires for the person who holds the position of chief academic official of a medical school?*

Answer: Until 1980s, Taiwan was governed by an authoritarian regime. Public university presidents were appointed directly by the MOE. The president of a university is vested with power of appointing the dean of its medical school. Whether he would consult the faculty concerned or set up a search committee was at his own discretion. Beginning late 1980s, gradual liberalization of the governance of higher education institutions took place. Now, according to the Article 10 of the University Law (Appendix 4), the method of selecting chief academic official of a medical school is left for the university senate or assembly to decide. Setting up a search committee for the purpose mandatory.

The information extracted from the bylaw written for the Search Committee for the Dean of National Cheng Kung University College of Medicine perhaps can illustrate adequately the qualifications of a dean medical schools in Taiwan are seeking. The Bylaw (Appendix 8) states that a candidate should be one who holds the rank of a full professor in the medically related field; has had considerable academic accomplishments and is well known in the academic circle; possesses broad vision of education in general and medical education in particular; and is a good coordinator

and a competent leader. Besides, he has to be a person of sound ethical judgment in conducting the educational program and is physically healthy. Again as an example, just this past summer National Cheng Kung University College of Medicine under this Bylaw selected internationally known cardiologist, Professor Rucy J. Sung of Stanford University Medical School as its new dean.

Documentation: University Law(Appendix 4) , Statute for Employment of Educator (Appendix 7, Article 9) , Principle of the Search Committee for the Dean of National Cheng Kung University College of Medicine (Appendix 8) , Rules of Qualification for Teaching at Higher Education (Appendix 9)

Question: *What are your country's requirements related to the participation of the faculty members of a medical school in decisions related to admissions; the hiring, retention, promotion, and discipline of faculty and curriculum?*

Answer: Until 1993, only one route was available to all high school graduates to advance to higher education, and that was known as the College Standardized Test. A student had to perform well in order to get into the school or the specific area of study of his or her choice because this system is based on computer matching. Therefore, no college up to that period needed an Admissions Committee. This system of student enrollment began to draw increasing criticism from different sectors of the academic community, especially medicine, since the personality fitness of a student to become a physician was not evaluated by an interview. As Taiwan government became more liberal in the late 1980s, medical schools were allowed to recruit students by MCAT-type test plus an interview, beginning 1993. As of summer 2001, the Standardized Test has been abolished altogether (see Appendix 10). TMAC is now requiring all medical schools to set up a standing Admissions Committee to handle admissions. The Admissions Committee is made entirely of medical school faculty members. It must be stressed that students enrolled in medical schools are top performers among the more than 120,000 high school graduates each year. The medical profession still ranks first as their choice and is attracting the best students.

Except for Admissions Committee, which heretofore was an ad hoc committee, since late 1980s, matters related to the hiring, retention, promotion and discipline of faculty as well as curriculum have been in the hands of three-tier committees

consisting of faculty members elected by the faculty body (see Appendix 4, Chapter 4, Articles 13.14). Besides these, all medical schools have also faculty committees overseeing the operation of the library, allocation of space, security of the campus, curriculum organization operation of animal facilities and the like (see Appendix 11, Chapters 2.3.4). Function and efficiency of these committees is also subject of accreditation assessment.

Documentation: University Law (Appendix 4, Chapter 4) · Rules of Qualification for Teaching at Higher Education (Appendix 9) · New Method of College Students Recruitment (Appendix 10) · Teachers Law(Appendix 11)

Question: *What requirement does your country impose on a medical school that offers part or all of its program at a geographically separated site (sometimes called a branch campus or additional location) to ensure that the quality of education at that site is comparable to that at the main campus and that students are evaluated in a comparable manner at all sites?*

Answer: This is not applicable. To have adequate bedside teaching facilities is a prerequisite for approval to establish a medical school. None of the medical schools in Taiwan has a geographically separate campus. However, Such a situation may develop in the future. TMAC has included such a clause in its Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 4)

Documentation: Guideline for the Accreditation of Medical Schools (Appendix 5)

4. Educational Program

Question: *How long must a medical school's program of medical education leading to the M.D. degree (or equivalent) be in your country?*

Answer: There are two different types of educational program. One is called the 7-year program, and the other the 5-year or post-baccalaureate program. The former accepts high school graduates, while the latter only college graduates. At the moment, only one of the eleven medical schools, Kaohsiung Medical University, runs two programs in parallel. All other medical schools only run the 7-year program. Taiwan's

higher education uses the so-called credit hour system. Medical students have to complete a set number of credit hours, consisting of both required and elective courses before they graduate. In terms of number of weeks, the post-baccalaureate programs requires 144 weeks (18 weeks per semester, 2 semesters per academic year, and a total of 4 years), plus one year (50 weeks in actuality) of internship of education and training for a student to graduate. Total, therefore, is 190 weeks. The 7-year program has additional 2 years or 72 weeks of premed education.

Documentation: NCKU Schedule of Class (Appendix 13)

Question: What are your country's requirements related to the basic sciences component of a medical program leading to the M.D. (or equivalent) degree? What subjects does your country require a medical school to include in the basic sciences? What requirements does your country have for the laboratory portion of the basic sciences curriculum?

Answer: Traditionally MOE with the recommendation of the Committee on Medical Education and consultation with Medical School Dean's Conference sets the required basic sciences courses. Knowledge in these required courses is tested in the National Board. These courses are all similar to what American medical students have to go through. Namely, they include anatomy, histology, embryology, biochemistry, microbiology, immunology, genetics, physiology, pharmacology, pathology and laboratory medicine (clinical pathology), public health and epidemiology, etc. These required major courses are sprinkled with elective courses in related areas for students to pick up according to their individual interests. It must be emphasized that although didactic lectures or small group discussions are all conducted in Chinese language, the recommended books, including textbooks and reference books are all in English language. To just give one example, Harrison's Principles of Internal Medicine is an inevitable set of books on each student's bookshelf. For your reference, a list of required basic science courses given at National Cheng Kung University College of Medicine is included as Appendix 13.

All above-mentioned courses have concurrent laboratory exercises. Compared to some American medical schools, such as the George Washington University Medical schools, many more number of laboratory exercises is still retained. In gross

anatomy, dissection by the students is still a must. The effects of these exercises are reinforced with various audiovisual teaching materials. Each medical school's educational program used to require MOE's approval. MOE has agreed in principle to transfer this authority to TMAC henceforth.

The relevance of basic sciences teaching to clinical medicine is one of the important items during TMAC assessment

Documentation: NCKU Schedule of Class (Appendix 13)

Question: *What are your country's requirements related to the clinical sciences component of a medical program leading to the M.D. (or equivalent) degree? What subjects does your country require a medical school to include in the clinical sciences*

Answer: All the major areas of clinical sciences listed in your document are covered. In addition, areas such as orthopedic surgery, ophthalmology, ENT, diagnostic imaging, physical medicine and rehabilitation, dermatology, radiation therapy are also included in the list of required courses. These disciplines are all included among the areas to be examined in the National Board. As mentioned above in the answer to your question regarding basic sciences, the clinical sciences teaching program also has to go through MOE's approval. This authority is in the process of being transferred to TMAC.

Documentation: NCKU Schedule of Class (Appendix 13)

Question: *What are your country's requirements related to the inclusion of disciplines that support the fundamental clinical subjects in a medical program leading to the M.D. (or equivalent) degree? What does your country require a medical school to include in these disciplines?*

Answer: This question regarding supporting disciplines such as diagnostic imaging and clinical pathology has essentially been answered in the two preceding questions (see Appendix 13 as an example).

Documentation: NCKU Schedule of Class (Appendix 13)

Question: *What are your countries requirements related to the inclusion of ethical, behavioral, and socioeconomic subjects in a medical program leading to the M.D. (or equivalent) degree?*

Answer: Such requirements are emphasized but spelled out by MOE in a rather general term in order for medical schools to develop their own version of educational programs in these areas. We have included the relevant program of National Cheng Kung University College of Medicine as Appendix 13 for your reference. It has to be noted that these courses related to ethics, behaviors and socioeconomy are interlaced with requirements for students to spend a set amount of time with patients at their bedside, or to take patients on a wheel chair for a walk. What is observed and experienced is brought back to the classroom for discussion. Again, how these courses are effectively conducted is one of the important focuses of assessment by TMAC. TMAC also has made strong recommendations to all medical schools that when a patient case is discussed in PBL, aside from the patient's medical problems, the ethical or socioeconomical ramifications of the case must be discussed.

Question: *What are your country's requirements related to the inclusion of communications skills in a medical programs leading to the M.D. (or equivalent) degree?*

Answer: The answer to this question is essentially the same as the preceding one. It is brought up in TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 5, III 6), Report of Assessment of National Taiwan University College of Medicine (Appendix 12, page __), and the sample curriculum of National Cheng Kung University College of Medicine (Appendix 13).

Documentation: Report of Assessment of National Taiwan University College of Medicine (Appendix 12) · NCKU Schedule of Class (Appendix 13) · TMAC Guideline for the Accreditation of Medical Schools (Appendix 5)

Question: *What are your country's requirements related to the design, implementation, and evaluation of a medical school's curriculum? Does your country require each medical school to have its own system for evaluating the effectiveness of its curriculum and making changes to the curriculum as a result of its evaluation? If*

so, what does your country require the faculty members of the medical school to play in that process? Alternatively, does your country mandate the evaluation of the curriculum all medical schools are required to have to be provided by some centralized authority or body? If so, what is that authority or body?

Answer: To answer these questions not according to the order listed above, MOE sets the requirements in educational program in a rather general term. Each medical school is then responsible for designing, implementing, and evaluating the effectiveness of the program. For these purposes, all medical schools have a Curriculum Committee, many of them with student representatives participating. Most schools have also subject subcommittee. Each and every medical school now has its own outside review committee to oversee the quality of educational program. However, the ultimate authority in evaluating the quality of medical education is now vested in TMAC.

All medical schools in Taiwan also engage students in evaluating each and every course they have taken, be it required or elective. These evaluations are analyzed by the school authority and directly delivered to the teachers involved. A sample of this type of evaluation is attached herewith as Appendix 14.

Documentation: University Law (Appendix 4, Articles 13.14) · National Cheng Kung University Course Evaluation by Students (Appendix 14)

5. Medical Students

Question: What are the requirements for the admission of students to medical schools in your country? Are these requirements specified at the national level for all medical schools or is each medical school allowed to set its own standards for admission provided it meets the general requirements specified by the government or other appropriate body?

Answer: Until 1992 when medical students were recruited solely through the College Standardized Test, a student aspiring for medical profession was tested in the following areas: Chinese, English, Mathematics, Physics, Chemistry, Biology and Dr. Sun Yat-Sen's Doctrine. This is decided by a quasi-governmental organization consisting of representatives of academic circle called Center for Standardized Exam

for Higher Education. Students enrolled in medical schools in Taiwan belonged to the 2,000 top performers of approximately 120,000 who sit in this Test. What areas they were to be tested in were made well known for the students. When the new method of application to medical school was introduced in 1993, tests for those recommended by high school teachers to go through the new route were changed to something similar to MCAT to include only Chinese, English, Mathematics, Social Sciences and Natural Sciences, with interview became an essential component of the admissions procedure. The College Standardized Test is now altogether abolished, replaced by the test plus interview system. Within this general framework, each school is now free to set its own additional admission standards. These standards have to be made known in the brochure to the public one year in advance. TMAC will closely monitor the admissions standards of every medical school.

Question: What access do students have to their records in your country? What laws (if any) govern student access to records and the confidentiality of student records in your country?

Answer: The confidentiality of student records in Taiwan is protecting under Computer Processed Personal Data Protection Law. TMAC also emphasizes the confidentiality of students' records (see Appendix 5, Chapter 2, Part 5, III 7)

Documentation: Computer Processed Data Protection Law (Appendix 15) · TMAC Guideline for the Accreditation of Medical Schools (Appendix 5)

Question: What are your country's requirements related to how medical schools must evaluate student achievement? Are medical schools free to establish their own methods? If so, how does your country determine if they are adequate? Alternatively, are there some national requirements such as standardized examinations that all medical school students must take?

Answer: The method of evaluating student achievement is largely left for medical schools to develop. MOE only gives the school a general principle. The mainstay of the evaluation method is written exam. However, depending on the type of courses, different technique is used, including observation of learning attitude, active participation in discussions, the quality of questions asked in the discussion and of

reports or papers written, and the like. The adequacy of these evaluation methods is closely examined by TMAC by extensive interviewing of faculty members, alumni of the school, as well as currently enrolled students at the time of assessment visitation.

Taiwan does have National Board Examination (Appendix 6) that is required of all medical school graduates to take.

Documentation: Sample of Schedule of National Board Examination, 2001 (Appendix 6) TMAC Guideline for the Accreditation of Medical Schools (Appendix 5)

Question: *What are your country's requirements for the provision of student services by medical schools?*

Answer: Medical schools in Taiwan provide the services to their students that are compiled in the Student Handbook, distributed to students at the admission or obtainable any time from the school administration. Some of these service items are required by MOE, while others are additional services developed and provided by the individual school.

All medical schools are required to have Student Counseling Service to help students' academic and non-academic problems. Associate Dean of Student Affairs is also mandatory. The intensity of Student Advisory system varies from school to school. For example, National Cheng Kung University College of Medicine has a system of every four students having an advisor, who is consulted by students on various matters or meets with students at intervals simply for a chat.

Five years ago, Taiwan launched a universal health insurance for its citizens. Medical students are covered by this system. College students also have another insurance to cover injuries sustained on campus. Medical students entering the clinical teaching years are subjected to serological screening to protect against infectious diseases. A good example is hepatitis B that is endemic in Taiwan. It is mandatory for hepatitis B antibody negative students to receive vaccination at the school's cost.

A large number of scholarships is available for students to apply for.

Several years ago, a new program was introduced for students to use summer break to go abroad to spend two months in hospitals mainly of North America, Australia and a certain number of European countries, in order for them to gain experiences in a different health care system. Medical schools help students to arrange this type of activities.

Documentation: Scholarships Available at National Cheng Kung University (Appendix 16) · TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 5, IV)

6. Resources for the Educational Program

Question: *What are your country's requirements related to the facilities a medical school must have?*

Answer: The MOE has laid down the minimum requirements for medical school facilities in its Procedure of Setting Up School. This document stipulates every thing from the financial resources to the per student capita area, both in terms of the campus size and the total floor size of the buildings (see Appendix 17). These are only the minimum standards a new school has to meet. Whether a particular medical school is making reasonable or laudable effort to add additional facilities to promote the continuing growth of the school is evaluated by TMAC. Even before the advent of TMAC, MOE used to periodically appropriate considerable amount of budget to improve the teaching facilities of medical schools, public or private alike. The most recent event of such a nature took place in 1995, in which MOE spent approximately US \$40,000,000 to renew and improve the teaching facilities of all medical schools according to individual needs. The current Chairman of TMAC is an expatriate professor of medical school who has considerable experience in international medicine. According to his evaluation, the physical facilities of medical schools in Taiwan is way above the average medical school he has visited in different parts of the world.

Most medical schools provide students with opportunities to engage in small spin-off laboratory or clinical research under professors' supervision. Most of these programs take place in the summer. At National Cheng Kung University College of

Medicine, one day in the fall is set for the students who have had research scholarship in the summer to present their findings. The current Chairman of TMAC established a nationwide summer student research fellowship fourteen years ago with the fund provided by then US Schering. It is still continuing and the day the summer student scholars gather together to present their data is now known as Schering-Plough Student Research Day. This program is administered by American Bureau for Medical Advancement in China (ABMAC) and is one of the few major programs of that organization.

Research animals are handled humanely, strictly according to the rules stipulated in Animal Protection Act, which is in essence identical to principles set by the US NIH. TMAC also has stressed this in its Guideline for the Accreditation of Medical Schools (see Appendix 5, Chapter 2, Part 6, II. 4)

Documentation: Procedure of Setting Up Schools(Appendix 17) 、 Private Medical School Subvented List, 1998~2000 (Appendix 18) 、 Animal Protection Act (Appendix 19)

Question: What are your country's requirements related to the size of the faculty a medical school is required to have? What are its requirements related to the qualifications for appointment to the faculty?

Answer: The size of the faculty body of public medical school is determined by the MOE, since a faculty member is considered to be a government employee. The standard number of the position given to each discipline is six. Within this framework, the school can adjust each department's size. The school can increase this number with the soft money it has raised. If the school establishes a graduate program, which has to be reviewed and approved by MOE, usually there will be four more positions given to that department. The restriction on the size of faculty body is much less rigid with private schools.

The standards of a teacher to be hired are set by the school. A new appointment as well as promotion of a teacher has to go through the review by a series of three-tier committees. However, the MOE's Council of Academic Review and Evaluation has the authority to determine the ranking of a teacher hired by any higher

education institution (see Appendix 11, Articles 16.17.18). The certificate of a teacher is issued by MOE, and when promoted a new certificate is issued.

Documentation: Teachers Law (Appendix 11)

Question: *What are your country's requirements related to a medical school's library?*

Answer: All medical schools in Taiwan, including the two that are part of a university, have a medical library. Medical libraries in general are well equipped with collection of medical books and journals, mostly in English language. The average number of medical journals subscribed by medical journals is 1000. Besides, these libraries are well equipped with computers directly linked up with Medline for literature search. The quality of helps provided by the librarian, utilization rate by teachers, students and employees are also among the important items of assessment by TMAC. National Cheng Kung University College of Medicine placed great emphasis on the quality of its library at the very moment of its establishment: its design and the overall strategy of procurement were helped by then Director of National Library of Medicine in Bethesda, Maryland, Dr. Martin Cummings. The average size of medical libraries in Taiwan is 16,500 square meters.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 6,IV)

Question: *What are your country's requirements related to a medical school's clinical teaching facilities?*

Answer: When a medical school is established, it has to have a teaching hospital of its own. This has been the tradition in Taiwan ever since Western medical education was introduced more than one hundred years ago and, therefore, for a medical school to have a US type affiliated hospital for teaching purpose is not a practice in Taiwan. These hospitals that are directly under the control of respective medical schools range in size from 500 beds to 2500 beds. However, these hospitals have to undergo a separate hospital accreditation to qualify as a teaching hospital. TMAC is beginning to be involved in the assessment of teaching programs of these hospitals to ensure that

they have good residency training program, which is of critical importance for good clerkship education.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 6,V)

Part III: Accreditation/Approval Processes and Procedures

1.Site Visit

Question: Does the entity that is responsible for accrediting/approving medical schools in your country conduct a site visit to a medical school prior to granting it accreditation/approval? If so, does the site visit include a review of the school's admissions process, its curriculum, its faculty, the achievement of its students and graduates, the facilities and the academic support services available to students? Does the site visit involve both the main campus of the medical school and any other branch campus(es) or additional location (s) operated by the medical school?

Answer: The answer to question number one is yes. The site visit lasts for four days. The answer to question number two is also yes. There are many more aspects the assessment team (site visit team) looks into. They are spelled out in the Guideline for the Accreditation of Medical Schools (Appendix5). The answer to question number three is NOT APPLICABLE. None of the medical school currently has a branch campus. However, TMAC is ready to do what is asked in question if such a situation occurs.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 1, Part 5)

2. Qualified On-Site Evaluators, Decision-Makers, and Policy-Makers

Question: What are your country's requirements regarding the qualification and training of the individuals who participate in on-site evaluations of medical schools, the individuals who establish the accreditation/approval standards for medical schools, and the individuals who decide whether a specific medical school should be

accredited/approved?

Answer: The qualifications of individuals who are invited to participate in the tasks described in this question are described partly in the TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 1, Part 1, II). These individuals are all senior educators in medical or related fields, have demonstrated ability to recognize what is excellence in the operation of medical schools, especially in the educational program, and are known to be men of vision. To illustrate how we went about to assemble people of this caliber, we are listing the name of individuals who: 1. have served in the Planning Committee of TMAC; 2. are serving on TMAC, and 3. have participated in the assessment visit of 2001. Many of the individuals included in the pool of assessment members, who belong to category 3, are recommended by medical school and selected by TMAC.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5) · Report of Assessment of National Taiwan University College of Medicine (Appendix 12) · TMAC Members list (Appendix 20)

3. Re-evaluation and Monitoring

Question: Does your country require accredited/approved medical schools to undergo periodic reevaluation to determine if they are still in compliance with the standards for accreditation/approval? If so, how frequently are medical schools reevaluated? How does your country monitor medical schools throughout any accreditation/approval period granted to them to verify their continued compliance with the standards? Are medical schools required to submit an annual report? If so, what does it contain?

Answer: TMAC originally set the period of 5-7 years for fully accredited status. It is likely to settle for 6 or 7 years. TMAC members have already agreed to require all medical schools that have been visited to file an annual report to TMAC. The report should highlight the improvements in all aspects of medical school operations made in the past academic year, concentrating in particular on how the deficiencies that have by TMAC assessment visitation have been corrected. If after the last assessment, TMAC had already made the decision to have another small assessment visit in two

years, the improvements described in the annual report will not lead TMAC to cancel the planned revisit.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 1, Part 2)

4. Substantive Change

Question: If a medical school wants to make a substantive change to its educational program or some other aspect of the medical school, what are your country's requirements requiring notification of the change to the appropriate entity and review by the entity?

Answer: Before TMAC was established, medical school were required to submit the plan of any substantive changes to MOE in advance for approval. The standing Committee on Medical Education within MOE was to be consulted on these matters. These matters are now increasingly transferred to TMAC for consultation and evaluation. For a medical school to switch the teaching from the traditional didactic, large classroom method to small group PBL type, even if it is to be phased in a stepwise manner, is considered to be a substantive change and is under intensive TMAC scrutiny. Assessment team members sit in the PBL sessions in order to evaluate the quality of teaching and learning under this system.

Documentation: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 2, Part 5, II 24)

5. Controls against conflicts of interest and inconsistent application of standards

Question: How does your country ensure that those involved in the accreditation/approval decision for a specific medical school do not have a conflict of interest that might prevent them from making an objective decision? How does your country ensure that your standards for the accreditation/approval of medical schools are applied consistently to all schools that seek that accreditation/approval?

Answer: This topic was an important issue that led to a long debate at the Planning

Committee meetings among the committee members. Members agreed that the standards to avoid the conflict of interest as described in LCME's Standard of Accreditation are very hard to enforce in Taiwan, or for that matter in Australia.

Taiwan is a small island of about 13,900 sq mi densely inhabited by 23 million people. The population density is so high that practically everyone knows each other through friendship or connected by family relations. The medical community is no exception. To make matters worse, until 1950s, Taiwan had only one medical school, and that was National Taiwan University College of Medicine. Amongst the graduates of this particular school are many accomplished medical academicians holding important leadership positions in many parts of the world. There are now ten medical schools already having graduates. But other than graduates of National Taiwan University Medical School, those from nine other schools have few graduated have attained the stature sought by TMAC, either as its member or to be included in the assessment member pool.

We nevertheless have strived to follow the principles of avoiding conflict of interest as described in TMAC Guideline for the Accreditation of Medical Schools (Appendix 5, Chapter 1, Part 5). No faculty member of school is allowed to assess his or her own school. We avoid, to the best of our ability, choosing an alumnus to become the member of the assessment team of his *alma mater*. One who is doing any consulting job for a medical school is disqualified as an assessment team member of that school also. All assessment members are required to reveal this sort of information. But for reasons stated in the preceding paragraph, it proved difficult in the first round of accreditation assessment to totally avoid using some alumni to visit National Taiwan University College of Medicine. The leader of that assessment team, current Chairman of TMAC is a graduate of that school, yet TMAC saw no alternative but to use him. For TMAC, the new system of accreditation it is trying to set up on a good footing is a learning process for the members of the medical educational community, a process of learning how to transcend their alumni mentality and to become an impartial promoter of the quality of medical education. We demand this idealism of all the people involved in accreditation. Dr. Monto Ho, a Harvard Medical School Graduate and a member of TMAC, for example, has commented that TMAC is a blue-ribbon committee. TMAC members did measure up to this idealism when the final assessment report on National Taiwan University College of Medicine

was passed without major revision even though a fair number of the assessment team members are that school's alumni.

It is expected that as we learned more about how to be objective and constructive in the accreditation processes in the future, more people will become qualified to be impartial assessment members. Then the standards to avoid conflict of interest will become more stringent in the future.

Documentations: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5)

6. Accrediting/Approval Decision

Question: How does your country use information on the performance of a medical school's graduates in reaching a decision on whether or not to grant that school accreditation/approval? What procedures does your country use to ensure that accreditation/approval decisions are based on your accreditation/approval standards?

Answer: This problem of "outcome" was a topic debated in the planning stage of TMAC. An effective and objective method of measurement and analysis is needed for this criterion. This is being developed at this moment. This consideration was the reason behind why TMAC decided to visit three "better schools" in the Taipei area in the first round.

To ensure that accreditation/approval decisions are based on our accreditation/approval standards is considered by TMAC members to be largely dependent on the consensus on the interpretation of the spirit of words spelled out in TMAC Guideline for the Accreditation of Medical Schools (Appendix5, Chapter1, Part 5.6.7.). In essence, it is based on the collective professional judgment. That is why we were very careful in selecting the TMAC members in order to fulfill TMAC's goals. MOE has never meddled in TMAC's decision-making.

Documentations: TMAC Guideline for the Accreditation of Medical Schools (Appendix 5)

Question: *Does your country have any benchmarks or minimal levels of performance on licensing examinations that medical school graduates must meet in order for the medical school to be granted accreditation/approval? If so, what are they?*

Answer: Taiwan does not have an independent organization equivalent to America's National Board of Medical Examiners. However, we do have National Board type of examination that all medical school graduates have to take in order to be licensed to practice medicine. The authority of this examination is vested in a special branch of the executive wing of the government. The medical community has time and again criticized the quality of the questions in this examination for many years. What happens is that the average national passing rate fluctuates widely from year to year that is unaccountable by the changes in the quality of medical educational programs conducted by medical schools. The method of testing and the quality of exam question are now undergoing complete revamping jointly by that branch of the government and the medical community led by Medical School Deans Conference.

At this stage, therefore, TMAC has not set a benchmark of passing rate of National Board of graduates of a medical school as an element of accreditation/approval, although the passing rate *is* taken into consideration. This practice will probably continue until the results of National Board have become more stabilized, consistent and deemed by TMAC as truly reflecting the quality of education the medical school graduates have received.

Documentation: The Passing Rate List of National Board Examination (Appendix 21)

Appendix

Taiwan Medical Accreditation Council

Appendix A

1. Minutes of the Dean's Conference called by MOE on 12/16/1998→Appendix 1
2. Accreditation Result Official Letter by MOE, 2001→Appendix 2
3. MOE Official Letter on Budgetary Contribution and Agreement to set up TMAC signed between MOE and NHRI→Appendix 3
4. University Law→Appendix 4
5. TMAC Guideline for the Accreditation of Medical Schools→Appendix 5
6. Sample of Schedule of National Board Examination, 2001→Appendix 6
7. Statute for Employment of Educator→Appendix 7
8. Principle of the Search Committee for the Dean of National Cheng Kung University College of Medicine→Appendix 8
9. Rules of Qualification for Teaching at Higher Education→Appendix 9
10. New Method of College Students Recruitment→Appendix 10
11. Teachers Law→Appendix 11
12. Report of National Taiwan University College of Medicine→Appendix 12
13. National Cheng Kung University Schedule of Class →Appendix 13
14. National Cheng Kung University Course Evaluation by Students→Appendix 14
15. Computer Processed Personal Data Protection Law→Appendix 15
16. Scholarships Available at National Cheng Kung University→Appendix 16
17. Procedure of Setting Up School→Appendix 17
18. Private Medical School Subvented List, 1998~2000→Appendix 18
19. Animal Protection Act→Appendix 19
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Appendix B

- Sample of Self-Evaluation Questionnaire to Medical Schools→Appendix 22

Appendix 1

Ministry of Education
Minutes of the Conference for the Discussion of Matters Pertaining to the
Accreditation of Medical Colleges

Time: December 16, 1998 (Wednesday), 14:30

Venue: Conference Room 2, 18 Floor, Central Administrative Building

Attendees: please refer to attendance sheet

I. Matters for Report

II. Matters for Discussion

Background: Concerning the planning and progress for the accreditation of medical education in Taiwan

Explanation:

1. The meeting of the Planning and Consultation Committee for the General Accreditation of Universities has decided that the accreditation of special disciplines should be carried out immediately. Therefore, our department has taken over the planning and drawn up the draft for the guidelines for the accreditation of special disciplines in universities, which has been passed at the first meeting of the conference of university presidents for the year 1998.
2. Professor Kun-Yen Huang of National Cheng Kung University, President of the Tzu-Chi Medical College, Dr. Ming-Liang Lec, and President of the National Taiwan University Hospital, Dr. Yuan-Der Lec attended the annual meeting of the National Committee on Foreign Medical Education and Accreditation in the United States, and they had given an explanation of the current situation of Taiwan and suggestions in their report. We hereby summarize their report and comments by the U.S. as follows:
 - A. Current situation of our country: The United States has ruled our system for accreditation of medical education in Taiwan as "non comparable", based on:
 - (1) The absence of an independent and neutral accreditation council for the accreditation of medical education.
 - (2) The lack of concrete description about the management of medical schools, including the experience and qualifications of the person in-charge, whether the educational work suits the interests of the

public and professional ideals, experiences and qualifications of the teachers, ability, efficiency and qualifications of the administrative personnel, etc.

- (3) The lack of concrete clarification concerning the curricula, including evaluation of the students' clinical skills, courses relating to ethics, behavior and social humanities, bedside teaching for clerks, etc.
- (4) The method for evaluation of the students' aptitude (whether they are suitable for the profession) and other aspects.
- (5) The lack of adequate evaluation, follow-up and management of efforts to improve the facilities and resources of the teaching (including teacher-student ratio, library, etc).
- (6) The absence of specifications about the period for accreditation.
- (7) The inability to specify how neutrality is maintained during the accreditation, how bias and conflict of interests are avoided, and how supervision of the improvement of the shortcomings by the schools are carried out.
- (8) The lack of comprehensiveness and completeness of the accreditation work, including the on-site evaluation.
- (9) The inadequacy of the experience and qualifications of the inspectors.
- (10) The lack of guidelines concerning the handling of cases where the accreditation standards have not been met or even failed.

B. Suggestions: Establishment of a neutral accreditation council to implement the following works:

- (1) Establishment of the periodicity for accreditation.
- (2) Establishment or amendment of the accreditation standards.
- (3) Implementation of the accreditation work.
- (4) Making conclusions on the accreditation of each school.
- (5) Discussions about the shortcomings of the accreditation work, e.g. items for improvement, so as to maintain a certain standard.

3. Summarizing the above, the accreditation of medical schools (or the health discipline) should actively be planned and implemented, of which there are three main points:
 - A. The establishment of a system for medical accreditation, including the responsible unit, accreditation council, period for accreditation, and method of evaluation, etc.
 - B. The establishment of a clear and appropriate criteria for accreditation.
 - C. To effectively utilize the results for the improvement of medical education, and follow-up the results at appropriate times.
4. Question: If the establishment of an independent and neutral accreditation committee for medical education is necessary, can this work be commissioned to a medical research unit of respectable credibility? (e.g. the National Health Research Institutes). The method for planning and implementation also needs discussion. Lastly, whether the scope of accreditation should cover the whole of the medical colleges, disciplines related to health, or only the departments of medicine should also be discussed.

Resolution: The Ministry of Education will commission the National Health Research Institutes to plan and implement matters relating to the accreditation of medical education, and request the Department of Health to provide the necessary assistance.

III. End of Meeting, 16:50

Appendix 2

MINISTRY OF EDUCATION
5 Chung Shan S. Road, Taipei City
Tel: (02) 23565889 Fax: (02) 23976943

November 6, 2001

Ref. No.: (90)-K-(IV) 90158104

TO: National Taiwan University
Fu Jen Catholic University
National Yang Ming University
Chang Gung University

c.c. National Health Research Institutes
Higher Education Dept., MOE
Medical Education Committee, MOE

Dear Sirs,

Attached please find an accreditation report about your school of medicine for the school year 2000 issued by Taiwan Medical Accreditation Council, National Health Research Institutes in a nation-wide medical education accreditation project assigned by us.

Please review the comments given in the report and carry out remedial action accordingly to improve educational quality.

With best regards.

Very sincerely yours,
MINISTRY OF EDUCATION

Tseng Chih-Lang /s/
Minister

Acting by authorized official

Appendix 3

Medical Colleges Accreditation Contract

Contract made on this 27th day of July, 2000 by and between:

The Republic of China, represented by the Ministry of Education ("MOE"); and
National Health Research Institutes ("NHRI")

For a project assignment it is mutually as follows:

1. Project

Accreditation on all the medical colleges in this nation.

2. Description of Accreditation Project

The background, objectives, working procedures, personnel, fund and process flow for this accreditation project are contained in the plan (as attached hereto) approved by MOE. NHRI shall execute this project in accordance with this contract.

3. Time Frame

This project shall be executed in a period of five years from August 1, 2000 till July 31, 2005. In case the time of completion of this project has to be extended due to any factor not attributable to NHRI, NHRI may apply for extension of the time of completion in writing within the above time frame, and extension will be allowed only after obtaining MOE's approval. The time of completion may be extended for once only, and the period extended shall be not longer than three months. MOE will not subsidize any costs and expenses required in the extended period.

4. Fund

NT\$20,629,405.00 (NT Dollars Twenty Million Six Hundred Twenty Nine Thousand Four Hundred Five Only) in total (see the attached plan for detail), to be disbursed to NHRI by MOE in six installments. The first installment, NT\$4,000,000.00 (NT Dollars Four Million Only) shall be disbursed within 15 days after execution of this contract. The second installment, NT\$4,000,000.00 (NT Dollars Four Million Only) shall be disbursed after NHRI's delivery of its appraisal report for the first year. The third installment, NT\$4,000,000.00 (NT Dollars Four Million Only) shall be disbursed after NHRI's delivery of its appraisal report for the second year. The fourth installment, NT\$4,000,000.00 (NT Dollars Four Million Only) shall be disbursed after NHRI's delivery of its appraisal report for the

third year. The fifth installment, NT\$4,000,000.00 (NT Dollars Four Million Only) shall be disbursed after NHRI's delivery of its appraisal report for the fourth year. The sixth installment, NT\$629,405.00 (NT Dollars Six Hundred Twenty Nine Thousand Four Hundred Five Only) shall be disbursed after NHRI's delivery of its appraisal report for the fifth year and a final review report for the 5-year period. NHRI shall produce the original evidences of its costs and expenses (including related supporting documents, properly sorted and bound into volumes) for inspection by the Ministry of Audit.

5. NHRI shall prepare plan first and obtain MOE's prior approval for execution of the project with the fund disbursed hereunder. Copyright on the reports and other works made by NHRI in the execution of this project shall be assigned to MOE upon completion of such reports and works, and NHRI hereby undertakes that it will not exercise the right of copyright owner against MOE. In case any part of such works is done by any third party, NHRI is hereby authorized to act on behalf of MOE to sign a copyright transfer contract with such third party for transfer of the copyright to MOE, and cause the third party to undertake that it will not exercise the right of copyright owner against MOE. NHRI shall not duplicate, modify or infringement on any other party's copyrighted works in its works. In case there is any dispute on use of other party's copyright, NHRI shall be solely liable to all legal responsibilities.
6. NHRI shall do its utmost to assist, give detailed explication and provide reference information whenever MOE desires to know anything about execution of this project. NHRI shall, upon MOE's request, allow any other third party to have access to any related local and overseas data and information it acquired with the fund disbursed hereunder.
7. NHRI shall require all its employees to comply with this contract, and to keep MOE's business secret in strict confidence; otherwise MOE may require NHRI to return all or any part of the fund disbursed hereunder according to the degree of violation, for which the Appraise shall not be entitled to make any objection.
8. The attached plan shall constitute an integrated part of this contract.
9. Any matter not specifically stipulated herein shall be subject to supplemental agreement to be made by the parties hereto through negotiation separately.
10. This contract is made in two originals, each of which to be held by a party hereto. This Contract is also made with two duplicates for filing at MOE's related units.

MINISTRY OF EDUCATION

Tseng Chih-Lang /s/
Minister

NATIONAL HEALTH RESEARCH INSTITUTES

C. W. Wu, Chairman /s/

Appendix 4

University Law

Promulgated on January 12, 1948

As amended on January 5, 1984

Chapter 1 – General Provisions

1. The missions of universities shall be to conduct academic research, cultivate talents, promote culture, serve the society, and promote the development of the nation.

Universities shall be guaranteed academic freedom and shall be entitled to autonomy within the legal framework.

2. The term “universities” referred herein shall include independent colleges.

Chapter 2 – Establishment and Categories

3. Universities are categorized as national, provincial (municipal), county (city) and private universities.

National universities are established by the Ministry of Education upon its review of the needs of the nation. Provincial (municipal) and county (city) universities are established by local governments upon approval by their respective superior government bodies and subject to the Ministry of Education’s final approval.

The Private School Law shall be applicable mutatis mutandis to the foundation of private universities.

4. The establishment of a university shall comply with the criteria for the establishment of universities. The criteria for the establishment of universities shall be stipulated by the Ministry of Education.

Any change to or closing down of a university shall be subjected to the approval by the Ministry of Education.

The direction and focus of development of each university shall be planned by the respective university with reference to the needs of the country and the characteristics of the university. It shall be implemented after reporting to and approved by the Ministry of Education, and is subject to evaluation by the Ministry of Education.

5. The university shall have a number of departments, and may set up graduate school independently.

The university may have a number of colleges each having a number of

departments and graduate schools.

The establishment of, change to or closing down of any college, department or graduate school shall be subject to the Ministry of Education's approval.

Chapter 3 – Organization and Meeting

6. Each university shall have a president to manage the university's affairs.

The president of national university shall be selected and appointed by the Organization and Appointment Committee under the Ministry of Education from among two to three candidates selected by the university's president selection committee. The president of other public university shall be selected and appointed by the Organization and Appointment Committee under the Ministry of Education upon recommendation of its competent authority. The president of a private university shall be selected by the Organization and Appointment Committee under its board of directors, approved by its board of directors, and appointed after obtaining the Ministry of Education's approval.

The aforesaid Organization and Appointment Committee in the university shall be composed of representatives from its faculty, administration staff and alumni respectively as well as honorable members of the public, among them the number of representatives of the faculty shall not be less than half of the total number of committee members.

The organization and operation of the Organization and Appointment Committee in the university, and provisions about the term of office and dismissal of the president shall be specified in the chapter of the university. The organization and operation of the Organization and Appointment Committee under the Ministry of Education shall be determined by the Ministry of Education.

Qualification for the president shall be subject to the related laws.

7. The president of new national university shall be selected and appointed by the Organization and Appointment Committee under the Ministry of Education directly, and the president of other new public university shall be selected and appointed by the Organization and Appointment Committee under the Ministry of Education from among two to three candidates selected and recommended by the competent authority. The president of new private university shall be selected and appointed by its board of directors upon the Ministry of Education's approval.
8. The university shall prepare its chapter and put it in effect after obtaining the Ministry of Education's approval.
9. The university may have one or two vice presidents, depending on its

scale, for a certain term of office to assist the president to manage the university's affairs and promote academic research. The vice president shall be selected by the president from among the university's professors in compliance to its chapter, and appointed after reporting to the Ministry of Education.

10. Each college within the university shall have a dean to manage the affairs of the college; each department shall have a chief to manage the affairs of the department; and each graduate school shall have a director to manage the affairs of the graduate school.

The dean, departmental chief and director of the graduate school shall be elected from among all the professors in the college, department or graduate school in accordance with the procedures stipulated by the university's chapter and appointed by the president of the university for a certain term of office.

11. The university shall have the following units:

- (1) Office of the Dean of Academic Affairs: In charge of student registration, curricula, publications and other teaching affairs.
- (2) Office of the Dean of Students' Affairs: In charge of counseling in psychology, campus life, extracurricular activities, hygiene and health care and other guidance.
- (3) Office of the Dean of General Affairs: In charge of document filing, clerical works, cashier, construction, custody and other general affairs.
- (4) Library: In charge of collection of teaching research data and information and provision of information service.
- (5) Office of Physical Education: In charge of physical education and sport.
- (6) Office of Military Training: In charge of planning and teaching of military and nursing courses.
- (7) Secretariat: In charge of secretariat affairs.
- (8) Personnel Office: In charge of personnel affairs.
- (9) Accounting Office: In charge of accounting and statistics.

Each of the above units may have a number of sections for different affairs.

The university may set up various research centers, computer centers and other units for the need in teaching, research and promotion, procedures

for which shall be prepared by the university and effective upon approval from the Ministry of Education.

12. The office of academic affairs, the office of students' affair and the office of general affairs shall each have a dean who is appointed by the president from among its professors, but the dean of general affairs may be employed as a full time position.

The dean of academic affairs, the dean of students affairs, the dean of general affairs and the head of other academic administration unit shall each be appointed for a certain term of office.

13. The university shall hold a university affairs conference, which will be the highest decision making body of the university administration to make decisions on important matters of the university. The university affairs conference shall be attended by the president, vice president(s), the faculty representatives, heads of each academic/administration unit; representatives from research fellows, staff representatives, student representatives and representatives of other related persons.

The faculty representatives shall be generated by election, and their number shall not be less than half of the total number of persons attending the conference. Among the faculty representatives, at least two-thirds shall be professors or associate professors. The method for selection of participants and ratio of persons attending and observing the conference shall be specified in the university chapter.

The university affairs conference shall be convened by the president at least once in each semester. Special university affairs conference shall be convened by the president within 15 days upon request from no less than one-fifth of the persons entitled to be present at the university affairs conference.

Whenever necessary the university affairs conference may set up various committees or task force to handle matters assigned during the university affairs conference. The name, task and composition of such committees shall be specified in the university's chapter.

14. The following matters shall be reviewed and decided during the university affairs conference:

- (1) the university's development plan and budget;
- (2) the university's chapter and other essential by-laws;
- (3) the establishment, change or suspension of a college, department, graduate school, and associated organization;
- (4) important affairs concerning academic affairs, students affairs, general affairs, research and others;

(5) review and approval of procedures related to evaluation on the faculty;

(6) resolutions made by the committees and ad hoc committees under the university affairs conference; and

(7) proposals at the conference and proposals from the president;

15. The university shall have an administration conference which shall be attended by the president, vice president(s), dean of academic affairs, dean of students affairs, dean of general affairs, deans of each college and heads of each academic/administration unit to discuss important administrative matters of the university. The president shall preside over the administration conference.

16. The university shall have conferences for matters about academic affairs, students affairs, general affairs, affairs of each college/department/graduate school. Conferences related to teaching, research and social services may be organized, their purposes and organizations of which shall be specified in the university's chapter.

17. To enhance the educational effect, elected student representatives shall be present the university affairs conference as well as other conferences related to their studies, campus life and formulation of rules for awards and punishments.

The university shall ensure and assist its students to form an autonomous body for management of matters related to their studies, campus life and rights, and shall establish a system for students to voice their complaints in order to protect the students' interests.

The procedures for the above two sub-sections shall be set forth in the university's chapter.

Chapter 4 – Classification and Appointment of Faculty

18. There are professors, associate professors, assistant professors and lecturers in the faculty for teaching, research and counseling of the students;

The university may hold seminars presided by its professors;

The university may employ teaching assistants to help in teaching and research;

The university may employ researchers to engage in research projects and professional technicians to teach;

19. There are three types of teacher's employment in the university: new employment, renewed employment and long-term employment. Employment shall be made on a just, fair and open principle, and vacancies shall be advertised in the media or academic journals.

Qualifications for new employment, renewed employment and long-term employment shall adhere to the related regulations.

Teachers on long-term contracts shall not be dismissed or fired unless there has been a gross violation or negligence, and after it has been agreed by the department/graduate school affairs conference and decided by the faculty examination committee.

Any teacher who disagrees with the termination or suspension of his/her contract may file a complaint to the complaint review committee.

20. The university shall establish a faculty examination committee at the university, college, department, and graduate school respectively to examine matters about employment, terms of employment, promotion and terminal or suspension of contract of the teachers.

The organization of the aforementioned faculty examination committee at each level shall be in accordance with the university's chapter.

21. The university shall have a faculty complaint review committee to review complaints from its faculty for the disagreement with dismissal and other actions. Its organization shall be specified in the university's chapter.

No decisions made by the complaint review committee shall influence the interested party's right to bring forth legal proceedings.

Chapter 5 – Student Qualification, Duration of Study and Degree

22. Any person who has graduated a public or accredited private senior high school, or possesses an equivalent qualification and has been granted admission via an open enrollment procedure may enter the university to study for a Bachelor degree.

Any person who has acquired a Bachelor degree or possesses an equivalent qualification, and has been granted admission to a Master's program via an open enrollment procedure may enter the university to study for a Master's degree.

Any person who has acquired a Master's degree or possesses an equivalent qualification, and has been granted admission to a Ph.D. program via an open enrollment procedure, may enter the university to study for a Ph.D. However, any graduate school student in the Master's program with outstanding academic achievement may directly apply for the Ph. D. program.

The rules for the open enrollment procedure stated in the preceding three paragraphs shall be formulated by the university and put in effect after obtaining the Ministry of Education's approval.

The criteria for equivalent qualification stated in the first to third paragraphs and the rules for Master's students to do their Ph.D. directly as stated in the third paragraph shall respectively be established by the Ministry of Education.

23. In principle, the length of study in the university shall be four years, extendable for one to two years depending upon the nature of each department. The duration for internships shall be from half to two years, depending on the actual needs.

University students may be approved to graduate earlier by a semester or a school year if he/she has earned the required number of credits. Students may be allowed to extend the length of study if he/she fails to earn enough credits required. These rules shall be formulated by the university and put in effect after filing with the Ministry of Education.

24. Students in any department may, upon approval, select a minor subject from another department or study for two majors, and may choose elective courses at other universities. University departments may, when necessary, grant admission to other university/college graduates and shorten their length of study accordingly. These rules shall be formulated by the university and put in effect after filing with the Ministry of Education.

25. A student who has completed the required courses and successfully passed the examinations at a department of a university, and has completed his/her internship, if required, shall be granted with a Bachelor degree by the university.

A student who has completed the required courses and successfully passed the examinations for a Master's or Ph.D. program of a university, and has completed his/her internship, if required, shall be granted with a Master's or Ph.D. degree by the university.

26. Universities may provide continuing education. The purpose is to provide particular courses or credits for study. Any person who has earned enough number of credits, successfully passed the qualification review and enrollment examination may be conferred with a degree in accordance with the preceding article.

The rules for the implementation of continuing education shall be stipulated by the Ministry of Education.

27. The university may set up branch campuses; the rules for which shall be stipulated by the Ministry of Education.
28. This law shall be applicable to the establishment, organization and educational facilities for all teachers' and private universities unless otherwise provided for in the Law for Cultivation of Teachers and the Private School Law.

The central government and the provincial/municipal government may establish open universities. The organization and educational facilities for this shall be subject to a separate law.
29. Any lecturer or teaching assistant who has obtained their qualification before the enactment of this law and who is still in service shall be eligible for promotion in accordance with the previous regulation.
30. Provisions in Articles 25, 26 and 37 of the Statute for Employment of Educational Staff in contravention with this law shall not be applicable.
31. Details for the implementation of this law shall be stipulated by the Ministry of Education and shall be put in effect upon the Executive Yuan's approval.
32. This law shall become effective from the date of promulgation.

Appendix 5

Origin

In recent years, calls for reforms of the medical education in Taiwan have been increasing, and as they reach unprecedented levels, many local medical schools have moved to restructure their teaching methods – quite a few have gone as far as trying to transform the system itself. Popular reforms include small group teachings, as well as problem-based learning (PBL). These varied reforms have led to increased disparities in the content of the medical education between different medical schools. All these highlight the need to provide an objective measure of the quality of medical education, so as to ensure that physicians are trained to provide an adequate level of care for their patients, in order to safeguard the health of the nation. To do so, countries around the world have relied upon a complete and systematic method of accreditation of medical schools. A glimpse at the history of development of higher education in developed countries shows the vital role accreditation plays in improving the quality of education: on the one hand it induces universities to establish a self-assessment mechanism, through which voluntary review and troubleshooting may constantly improve and assure the quality of education; on the other hand, through peer assessment by external examiners, more objective findings may be provided for the school, students and the public in general, and these findings may be used as references for school selection, human resources hunting, and donations and grants.

Since 1975, the Ministry of Education (MOE) in Taiwan has been using separate accreditation systems for various schools and departments, which are conducted on an irregular basis. Line 3 of Article 4 of the *University Law* stipulates that, “the general direction and focus of development of each university may be decided by the individual institution according to the national requirements and the school’s characteristics, pending

approval and assessment by the MOE." Article 2 of the *University Law Details for Implementation* further specifies that, "the assessment of the general direction and focus of collegiate development by each university as referred to under Line 3 of Article 4 of the *University Law* shall be carried out by the accreditation council formed by the Ministry of Education." This emphasizes the importance of collegiate accreditation in the tasks of the MOE. In 1997, the MOE gathered numerous professionals to discuss the work relating to the accreditation of colleges and universities in Taiwan. This led to a test program for the institutional accreditation universities, and the planning of programmatic accreditations of specific departments in the same academic year. Currently, the accreditation of medical education has been commissioned to the National Health Research Institutes (NHRI), and systematic accreditation is being independently and routinely conducted. This will soon be incorporated into the work of the collegiate accreditation council of the MOE's Academic Review Board.

In the United States, an independent college and university accreditation program was introduced in 1942, which began with that of medical schools. In the same year, in order to upgrade the level of medical education in the U.S., the century-old American Medical Association joined hands with the Association of American Medical Colleges to establish the Liaison Committee on Medical Education (LCME), which functions as the single, professional organization for the accreditation of all medical educational institutions in the country. The LCME later expanded their scope of work to the entire North American continent through cooperation with the Canadian accreditation authorities for medical education; a process akin to that in Australia and New Zealand (see the following paragraph). The prime mission of medical education, as quoted in the LCME handbook, is to carefully

select competent students with the right aptitude for medicine, who are then given a fundamental medical education and training in basic clinical skills, in the hope that these students would turn out to become compassionate and caring physicians devoted to a lifetime of learning and service toward the people. The LCME specifically emphasizes that the objective of medical schools is to cultivate physicians who are competent in basic general health care upon graduation. With this perspective, and together with the founding mission of individual medical schools, the LCME went about with the assessment, and was able to maintain a high quality of medical education. The LCME carries out accreditation of each medical school every seven years, and it has been doing so for the past six decades. It continues to contribute to upholding the standard of medicine in the U.S.

The system in Australia was largely developed from that of Britain. In Australia, medical graduates do not have to undergo a national certification system, but their competency is upheld by a strict yet credible national accreditation system for medical education. The agency in-charge of conducting the accreditation, the Australian Medical Council (AMC), was developed and established by the Ministry of Health of Australia in 1985. It was primarily designed to assess medical schools across Australia. The AMC based its assessment criteria around the framework of *Recommendations on Basic Medical Education* by the General Medical Council in Britain, and its own *Accreditation of Medical Schools and Medical Education* guidelines. An accreditation council was established in June of the same year, and the accreditation began in the following January 1986. In light of the varied levels of competency of foreign physicians practicing in Australia, the AMC moved to negotiate with the New Zealand Medical Council to encompass the accreditation of medical schools in New Zealand under the AMC system, so as to maintain a certain level of

proficiency and quality of medical education between these two countries. Compared with its counterpart, the LCME of the U.S., the AMC particularly emphasizes the interaction and coordination among medical schools and teaching hospitals.

The U.S. Congress has long assumed a supportive role to assist those citizens who are interested in medicine but are forced to study overseas by allowing them to be eligible for the Federal Family Educational Loan (FFEL). Yet a majority substantial numbers of them are unable to pass the certification examination upon returning to the U.S., undermining the good intentions and enormous resources provided to them via the student loans. A few years ago, the U.S. Congress urged the U.S. Department of Education to initiate a program for assessing the medical education in other countries. A National Committee on Foreign Medical Education and Accreditation (NCFMEA) was thus established by the U.S. Department of Education to review the standards used by foreign countries to accredit their medical schools. Findings by the committee may be classified into two categories: those that are "comparable" to the standards used in the U.S., and those that are "non comparable". Taiwan was grouped in the latter category, and the committee cited some of the shortcomings of the medical education system here back in 1998.

The main function of medical schools is to provide decent medical education to its students; the quality of which has an important impact on the health of the people, and even on the wealth of the nation. At a time when calls for reform in the educational and judicial systems are high in Taiwan, and efforts to strengthen the mechanism for assessment of collegiate education still in its infant stages, the criticism from a foreign country of the medical education in Taiwan should be taken as a crisis that could be converted to a turning