

MEDICAL BOARD STAFF REPORT

DATE REPORT ISSUED: January 10, 2011
 ATTENTION: Medical Board of California
 SUBJECT: Recognition of International Medical School
 Technion-Israel Institute of Technology,
 Ruth and Bruce Rappaport Faculty of Medicine,
 Technion American Medical Students Program (TeAMS),
 Self Assessment Report
 STAFF CONTACT: Curtis J. Worden, Chief of Licensing

RECOMMENDED ACTION:

Approve Medical Board of California recognition of the medical education provided by Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine, Technion American Medical Students Program (TeAMS) retroactive to the start of the TeAMS program, and that a site visit of the school is not necessary for this action.

BACKGROUND AND ANALYSIS:

The Board already recognizes Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine (Technion – Faculty of Medicine) pursuant to Section 1314.1 (a)(1) of Title 16, California Code of Regulations. Technion – Faculty of Medicine is a well establish medical school in Israel with the primary mission of training citizens of Israel to practice medicine in Israel. Technion-Faculty of Medicine started an American medical students program (English language) designed for U.S. and Canadian citizens with the goal of practicing medicine in the U.S. or Canada. TeAMS meets the criteria for the Board’s review pursuant to Section 1314.1 (a)(2) of Title 16, California Code of Regulations.

In June 2010, TeAMS officials submitted a Self Assessment Report to commence the Board’s review process of their medical school. Medical Consultant Mark Servis, M.D., has been reviewing the school’s application. Staff and Dr. Servis requested additional information from TeAMS in August 2010 and the medical school officials provided the requested information. The additional information was reviewed by Dr. Servis.

Staff requests that Board members review Dr. Servis’ report and determine whether to recognize the medical education provided to students by TeAMS.

Alternatively, if the Board requires further information regarding the school’s educational resources before a decision is reached, staff will request TeAMS officials to submit the information for your review during a future meeting. If the Board determines site inspections are necessary prior to making a determination, staff will prepare the necessary documents.

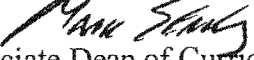
FISCAL CONSIDERATIONS:

In accordance with Business and Professions Code Section 2089.5, the costs of conducting a site inspection are borne by the medical school applying for the Board's recognition. These costs include all team members' air and ground travel costs within the guidelines allowed by the State, the consultant's daily per diem expense, and the consultant's travel expenses to and from any Board meetings where the team presents its report. Subsection (e) of Section 1314.1 of the regulations requires the medical school to reimburse the Board for the team's estimated travel expenses in advance of the site visit.

If you have any questions concerning this memorandum, please telephone me at (916) 263-2382.

December 27, 2010

To: Linda Whitney
Executive Director
Medical Board of California

From: Mark Servis, MD 
Professor and Associate Dean of Curriculum and Competency Development
UC Davis School of Medicine
2230 Stockton Blvd.
Sacramento, CA 95817

Re: Evaluation of the Technion-Israel Institute of Technology, Faculty of Medicine
"American Program" or Technion American Medical Students Program (TeAMS)
Self Assessment Report; Application for Recognition in California.

BACKGROUND

The Medical Board of California requested a review of the Self Assessment Report submitted by the Technion-Israel Institute of Technology, Faculty of Medicine in June 2010 for its TeAMS or English-language "American Program", whose mission is to prepare U.S. and Canadian citizens to practice medicine in the United States and Canada. The originally submitted Self Assessment Report from Technion did not closely follow the format of the Board's Self Assessment Report and was missing information in some areas. It also contained some information that was not requested. Board staff subsequently requested missing and clarifying information from Technion, which was provided for review on November 10, 2010. The additional information provided by Technion addressed all areas and was sufficient to complete the evaluation.

Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine, is a state sponsored medical school in Haifa that has graduated over 4,000 physicians in the past 40 years. They have a long established six year medical education program in the Hebrew language for Israeli citizens, and began a five year joint English language medical education program with Touro College in New York in 1983 for students who wanted to pursue residency training in the United States. They discontinued their joint program with Touro College in 2006 and began their own independent four year English language program based entirely in Haifa in 2006. The mission of this new program is to prepare students for residency training in the United States and Canada. The TeAMS program is small and is limited to 32 students per year, with a maximum of 35, to "allow more personal teaching." Since this new program is independent of the Touro program that is already recognized by the Medical Board of California, and is different from their standard six year Hebrew language program for Israeli citizens, it comes under the purview of subsection (a)(2) of Section 1314.1, Title 16 of the California Code of Regulations, and requires the Board's individual review.

This report is based on my review of the documents submitted by Technion. The goal of the review was to determine if the medical education received in the new Technion American Medical Students Program (TeAMS) meets the requirements of current California statutes and regulations for recognition by the Medical Board of California.

RECOMMENDATIONS

The Technion American Medical Students Program (TeAMS) has provided sufficient documentation to satisfy the criteria in Sections 2089 and 2089.5 of the Business and Professions Code and Section 1314.1 of Title 16, California Code of Regulations. The program takes full advantage of the resources of an excellent larger medical school for Israeli citizens, with strong faculty and established clinical training sites throughout northern Israel. The connection to a strong research faculty and graduate students in the Technion-Israel Institute of Technology provides students the opportunity to participate in research and encourages use of state of the art knowledge and teaching in medicine by the faculty.

REVIEW

The following is a detailed assessment of TeAMS based on the relevant California statutes and regulations and on Technion's responses to the Self-Assessment Report.

Business and Professions Code Section 2089

Section 2089 requires the medical curriculum to extend over four years or 32 months of actual instruction. TeAMS is a full four year program that consists of 4750 hours of formal instruction. TeAMS therefore meets the Section 2089 requirement for a minimum of 4,000 hours of course instruction. Students are required to attend 80% of classes in the first two years and full attendance is mandatory for students in the third and fourth clinical years. Attendance is monitored by students signing into classes in the preclinical years and is part of the evaluation of students in the clinical years. This meets the Section 2089 requirement for 80% actual attendance in all courses. Instruction in pain management and end-of-life care is included in the Introduction to Clinical Medicine course in the second year, and the internal medicine and anesthesiology clerkships in the third and fourth year.

Business and Professions Code Section 2089.5

The documents provided by Technion for the TeAMS program demonstrate that instruction in the clinical courses meets or exceeds the minimum requirements of Section 2089.5. For example, Section 2089.5 requires a minimum of 72 weeks of clinical coursework. TeAMS requires 80 hours and includes all of the required minimums of surgery, medicine, family medicine, pediatrics, obstetrics and gynecology, and psychiatry stipulated in Section 2089.5.

Clinical rotations are in established teaching hospitals with Technion faculty in Haifa and other regional hospitals in northern Israel. Technion has sufficient numbers of clinical faculty in its teaching hospitals to provide experiences in all specialties. Technion has also established two "exchange" agreements with USC and UC Irvine in the United States to allow TeAMS students in their fourth year to do required clinical rotations at these California schools.

California Code of Regulations, Title 16, Division 13, Section 1314.1

The stated mission of the TeAMS program is to "produce a quality physician, placing professionalism at the center of teaching while fostering research abilities and scientific know-how." The mission and goals have been systematically reviewed by the faculty and administration over a series of four "Vision and Mission" retreats from 1997 to 2010, with comprehensive review of the school's strengths, weaknesses, and opportunities for improvement. As a result the school does have a clearly defined mission statement with educational goals and objectives.

As required in Section 1314.1, the administration and governance system allows the institution to accomplish its objectives and the faculty have a formal role in curriculum oversight and evaluation of student progress. There is an adequate number of faculty available for the TeAMS program with 420 faculty in the Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine, who also teach in the larger Hebrew language six year program. The six year Hebrew language program has 110 students per year. The faculty include 45 full time pre-clinical researchers and 375 clinical faculty. The faculty credentials that Technion provided demonstrate they are qualified to teach their respective courses and fulfill their roles, and include two Nobel Prize winners in Chemistry. Research has a prominent role in the education of students in TeAMS and is an area of emphasis for the school given its connection to the Technion Institute of Technology and its active research programs.

The structure and content of the educational program provides an adequate foundation in the basic and clinical sciences and enables students to learn the fundamental principles of medicine, to acquire critical judgment skills, and to use those principles and skills to provide competent medical care. TeAMS curriculum makes extensive use of active learning methods such as problem-based learning and small group teaching in the preclinical years given the small class size, and promotes self-directed learning in its students consistent with its stated mission. Efforts are made to standardize the clerkship experiences across the eight regional teaching hospitals.

Technion has organized central oversight of the curriculum. Courses and faculty are systematically and regularly evaluated by students to ensure they are meeting objectives and to ensure quality. Faculty define the types of patients and clinical conditions that students must encounter and the expected level of student responsibility in clinical courses. The student's experiences in courses can be modified to ensure that the objectives are being met. Students are comprehensively evaluated in all courses and a broad range of evaluation instruments are used including OSCEs and the USMLE.

Students were just recently required to pass USMLE Step 1 and Step 2 CS and CK, but past performance by students who voluntarily took the UMSLE is anecdotally good.

TeAMS has clear admission and promotion standards. There is a description of the admissions criteria, student selection and promotion criteria, and admissions oversight provided from an Admissions Committee. These standards are consistent with those utilized by U.S. and Canadian medical schools. Students having difficulty are comprehensively assessed and remediation plans are determined by a "Student Advisory and Monitoring Committee" chaired by the Deputy Dean of the Faculty of Medicine with key teaching and advising faculty as members of the committee. The school has not kept track of its graduates placement in residency training programs, a curious omission given the usual attention in medical schools to annual NRMP results, particularly for a school whose mission is placement in US residency training programs. The school does however plan to track these results in the future, which would be an important part of assuring compliance with (14) Evaluation of Program Effectiveness.

There are no branch campuses. Records and student transcripts are kept indefinitely. There is an established quality assurance program for patient care in the main teaching hospital, Rambam Medical Center, and affiliated regional hospitals. Facilities at Technion are state of the art and include all needed physical, laboratory, library and academic resources, classroom space, and technology needed to fulfill its mission and objectives.

Technion presented information on its financial resources in the form of the entire school's Financial Statement from September 30, 2009. The funds for TeAMS were not separated out. Tuition for TeAMS students is \$25,000 annually. Technion is a state school with government support and a long history, so the school appears to have more than adequate financial resources to carry out its stated mission.

SUMMARY

In summary, I believe there is sufficient documentation to support the application for recognition of the TeAMS or English-language "American Program" of Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine retroactive to the beginning of the Haifa-based program that was no longer affiliated with Touro College in 2006. Information about the Touro College affiliated program was not provided in their documentation and therefore is not addressed in this review. This TeAMS program of 32 students per year exists within the larger, well established medical education program at Technion and is compliant with the requirements of current California statutes and regulations for recognition by the Medical Board of California.

Thank you for the opportunity to review the materials from Technion-Israel Institute of Technology, Ruth and Bruce Rappaport Faculty of Medicine.