

NEW YORK STATE EDUCATION DEPARTMENT

Report of a visit to the

Universidad Autonoma de Guadalajara

November 26-30, 1995

and

Maimonides Medical Center

February 26, 1996

INTRODUCTION

The objective of the site visit team was to evaluate the precinical component of the program of medical education of the Universidad Autonoma de Guadalajara that takes place in Mexico and the clinical component of the University's program of medical education that takes place in New York State. The major purpose of the visit to the campus in Guadalajara was to assess that part of the University's program of medical education, primarily the basic medical sciences, which prepares students for clinical training. The purpose of the visit to Maimonides Medical Center was to assess the clinical training which is offered to Universidad Autonoma de Guadalajara's students, to review faculty and student records, and to meet with academic and administrative officers of the University regarding the structure for monitoring and supervising clinical training that takes place in New York State.

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The team members reviewed individually all of the materials provided by the University prior to the visit. These included the Data Base Document, the appendices to it, and the catalog. Student and faculty records and curricular materials were examined in Guadalajara and at Maimonides Hospital. The team inspected academic and hospital facilities in Guadalajara and hospital facilities in New York State. The team members interviewed administrative officers and faculty members in Guadalajara and New York State. On the basis of these activities, the following observations related to appropriate sections of the Guidelines for the Evaluation of Medical Programs are presented with the respect to the program for International Students as offered by the University.

FOREWORD

The Universidad Autonoma de Guadalajara was approved with conditions in 1983. A revisit took place in 1987. Based on the findings of the site visit team, approval was continued on May 26, 1988, effective through June 30, 1992. Approval beyond June 30, 1992 would have been dependent upon the results of the Department's subsequent formal review, which was scheduled to occur prior to June 30, 1992. In December 1991, however, the University informed the Department that approval would not be sought beyond June 30, 1992. On that date the Department's approval expired. In 1995, the University requested that an evaluation of its program leading to approval be undertaken.

ADMINISTRATION

The University was founded in 1935 and an act of permanent incorporation was granted to the Universidad Autonoma de Guadalajara (UAG) by the National Autonomous University of Mexico on August 3, 1937. On July 16, 1991, by presidential decree number 158, published in the Diario Oficial de la Federación, university educational autonomy was granted to UAG, which permits the University to award academic degrees, legitimacy testified to by the national Secretaria de Educacion Publica (SEP), Department of Education.

Ownership is vested in Ia Universidad Autonoma de Guadalajara, Asociaci6n Civil (A.C.), a non profit organization with standing under mexican law similar to that of a non profit corporation in the United States.

The University offers numerous semiprofessional and specialization courses, and grants 49 undergraduate, 26 master's and 2 doctor's degrees. The Universidad Autonoma de Guadalajara is accredited by the Mexican Federal Department of Public Education.

The University comprises over twenty schools-including the schools of Accounting, Agriculture, Architecture, Biological Sciences, Business Administration, Chemical Science, Computer Science, Dentistry, Economics, Education, Engineering, Fine Arts, Industrial Design, Interior Design, International Careers, Law, Linguistics, Mass Communications, Mathematics, Medicine, Natural Sciences, Nursing, Psychology, and the Tourist and Hotel Industries. In addition, the UAG maintains educational exchanges and affiliations with universities in the United States, Brazil, Japan, and many other countries worldwide. Making maximum use of its resources, the University operates an elementary school, two middle schools, and three preparatory schools, as well as postgraduate and continuing - education divisions.

Facilities include two teaching hospitals, three convention centers, four libraries, a newspaper printing plant, a large publishing shop, a television studio, a planning and building department, and a legal department. The University offers numerous additional services and facilities as well. In conjunction with its library services, the UAG provides a map room, a periodicals section, a film library, and a data bank; the University also has its Tiajomulco de Ziii-iga experimental farm, the Center of Applied Psychology, the International Languages Center, the Center for Asian and Latin American

Studies, sports installations, computer laboratories, specialized laboratories in different areas of education, a travel agency, a bank, automatic tellers, a copy center, postal service, a sports shop, a gasoline station, a bookshop and school-supplies store, a clinic specializing in sports medicine, and UNICO, Universidad en la Comunidad, the first community college in Mexico.

According to the catalog, ‘The UAG School of Medicine strives to produce physicians who are compassionate as well as capable of treating illness. The faculty recognizes that performance, as a physician requires not only intellectual skills but also certain personal characteristics and behavior that reflect sensitivity to human needs. The curriculum and instructional methods are designed to develop and enhance these qualities in each student.’”

The members of the Board of Trustees are:

Sr. Dr. Luis Garibay Guti~rrez

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Sr. Ing. Juan Jose Leafio Alvarez del Castillo

Director General

Universidad Autonoma de Guadalajara

The principal administrative and academic officers of the UAG School of
Medicine are:

Nestor Velasco Perez, M.D., Ed.D.

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Jose Miguel Carillo Velarde, M.D.

Associate Dean for Academic Affairs/Secretary of the School of Medicine

Angel Orozco Bravo, M.D.

Associate Dean for Clinical Affairs

Jesus Flores Sanchez

Director of the Institute of Biological Sciences and Associate Dean for Basic
Sciences

Jesus Castillo Pacheco

Director of the Ramon Garibay Hospital and Associate Dean for the Program of
Medicine in the Community

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Coordinator of Internship and Clinical Rotations

lic. Alberto Olivares Duarte

Administrative Director of the Medical Ambulatory Care Unit

Jose Miguel Carrillo Velarde, M.D.

Registrar for the School of Medicine

Uc. Antonio Leaflo Reyes

Director of Finances of Universidad Autonoma de Guadalajara

The catalog specifies, among other things, the requirements for admission to the School of Medicine; the application procedures; the documents required for the admissions process; tuition, fees, and expenses; its refund policy; leaves of absence and withdrawal; transfers and advanced standing; student behavior and discipline; grievances, academic progress and promotion; the grading system; the instructional objectives and methodology of the program of medical education; the curriculum; and information for the North American student in Mexico.

FACILITIES

The University maintains two primary facilities for the program of medical education. The first two years are spent at the Institute of Biological Sciences (ICB) which is approximately one mile east of the central university campus. The final two years are spent at the Dr. Angel Leafio University Hospital (HAL) and at other affiliated hospitals for specific clinical training.

The ICB has 11 buildings containing approximately 11,000 net usable square meters in 12 classrooms and one auditorium with seats for approximately 2,500 students. There is an anatomy dissecting room (3 amphitheaters) with 18 cadaver tables; an anatomy microscopic laboratory (two laboratories for histology-embryology) with 40 student seats and 40 microscopes per laboratory; three biochemistry laboratories with a total of 100 student bench spaces; three microbiology laboratories with a total of 154 student bench spaces; a physiology laboratory with 155 student work seats and a laboratory for the development of clinical abilities. Other resources include medical photography and illustration, an electronics shop, a machine shop, audio-visual multiple media view area and space for dogs, cats, rats, guinea pigs, mice, rabbits and lambs for preclinical surgical practice.

Dr. Angel Leano University Hospital (1-LAL) and Medical Center contains a large teaching hospital, clinical laboratories, a pathology laboratory, six lecture halls, twenty large classrooms, and eighty-eight small classrooms for personalized clinical work with patients.

An innovative Patients-in-Study Program (UPE) gives added clinical depth to the HAIJ Medical Center. Patients in need of medical treatment are brought into this program and are provided with free medical attention in exchange for the added clinical exposure it affords

to students. The patients in this program stay for periods long enough to assure adequate follow-up on the clinical course of their illnesses.

Besides a large library housing both Spanish and English books, journals, and other publications, this campus contains an audiovisual laboratory with computer stations for clinical learning and problem-solving and an enormous collection of self-study modules.

Among HAL's facilities are the neonatal Intensive Care Unit; a large outpatient service with various specialty clinics; emergency room; and the most advanced surgical and radiological services, sophisticated patient-monitoring systems, and extensive audiovisual instructional facilities.

In addition to its key position in the School of Medicine's undergraduate clinical-instruction program, Dr. Angel Leaflo University Hospital and Medical Center offers postgraduate training in fourteen specialties: anesthesiology, dermatology, endocrinology, general surgery, internal medicine, neurology, neurosurgery, obstetrics and gynecology, ophthalmology, pediatrics, otolaryngology, radiology, traumatology and orthopedics, and urology.

The clinical science library contains 9,895 volumes and the clinical sciences laboratory contains 15,895 volumes. The total number of volumes circulated outside the basic science collection annually is approximately 36,000 books and 7,000 journals; the total number of volumes circulated outside the clinical science collection is approximately 72,000 books and 48,000 journals.

The audiovisual education center of Basic Sciences campus (ICB) has 66 audio viewers, 5 monitors, 4 recorders of videomagnetic tape, as well as cassettes, 62 anatomic models, 7 microphones. In stock: 665 audiovisual programs, videos and.. video tape-recorded programs. It also has 42 computers (PC) used for student self-evaluations.

The audiovisual education center of Clinical Sciences campus (HAL) has 80 audioviewers, 4 monitors, 3 recorders of videomagnetophonic tape, as well as cassettes, 200 anatomic models, 2 slide viewers, and in stock: 1185 audiovisual programs, 258 videos and recorded programs on videomagnetophonic tape, 31 computers (PC) for the studio of clinical cases and self-evaluation, with 4 cassette recorders.

The basic science library has one professional full-time librarian and seven nonprofessional full-time staff. The clinical sciences library has three professional librarians and 14 nonprofessional full-time staff.

FACULTY

At the time of the site visit there were 113 full-time basic science faculty distributed

as follows:

Anatomy/Morphology	13
Biochemistry	10
Microbiology	8
Pathology	8
Pharmacology	6
Physiology	9
Introduction to Surgery	7
Public Health	5
Introduction to Clinic	14
Psychology	6
Pathophysiology/Propedeutics	23
Introduction to Computer Science	4

All of the basic science faculty hold the rank of professor.

According to the Data Base Document, there were 345 clinical faculty distributed as follows:

Clinical Departments	Professor	Associate Professor	Assistant Professor	Instructor and Other	Full-Time	Part-Time
ANESTHESIOLOGY						
DERMATOLOGY	6					
FAMILY MEDICINE	25				25	
INTERNAL MEDICINE	25			74	25	8
NEUROLOGY	8	4			8	
GYNECOLOGY/OBSTETRICS	7			38	7	2
OPHTHALMOLOGY	5	1			5	
ORTHOPEDICS	8				8	
E.N.T.	7	1			7	
PHYSICAL MEDICINE						
PEDIATRICS	9	2		37	9	2
PSYCHIATRY	8	5			8	
PUBLIC HEALTH						
PREVENTIVE MEDICINE						
RADIOLOGY		3				
SURGERY	2			38	2	
UROLOGY	8	1			8	1
APPLIED CLINICAL	3				3	

INFECTIOUS DISEASES	4	1			4	2
ENDOCRINOLOGY	6	2			6	2
FORENSIC MEDICINE	1				1	
NUTRITION	5				5	

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Unless otherwise provided, the regular appointment period for faculty of the School of Medicine is August 1 to July 31 or January 1 to December 31. The duties of a faculty member, according to the Faculty Handbook, are: (1) assume responsibility for the supervision of students in the education process and in relationship to patient contact; (2) exercise leadership in recommending to the Dean any curriculum changes he/she sees appropriate; (3) participate in discussion of those issues regarding curricula as they may arise within the School and/or in the Affiliated teaching institutions; (4) may initiate the development of new programs and should participate in review of the curriculum at regular intervals; (5) monitor programs of a specific preclinical or clinical clerkship, interdisciplinary opportunities, and may conduct program evaluations on a routine, periodic basis; and (6) maintain liaison with the educational committees of the School of Medicine.

The chairperson of a department has the responsibility of recommending new appointments when the need has been established and it is within the budgetary allowances. The need for new faculty appointment may be justified via intra/inter-departmental meeting, the offering of new courses or the retirement or resignation of faculty members. Under special circumstances additional funds may be allocated to the department for recruitment of new faculty members.

The Faculty Handbook listed the following guidelines for the appointment of faculty:

(A.) Medico Cirujano Titulo (Physician-Surgeon degree) for full-time/part-time faculty in Mexico or its appropriate equivalent for adjunct faculty in other countries (e.g., an M.D. degree in the United States) except that a professional degree other than a medical degree may be appropriate for basic science departments; (B.) Graduate medical education and board certification where appropriate or required; (C.) Thorough knowledge of the subject(s) he/she will be teaching in the department(s) in which he/she has appointments(s); (D.) Adequate pedagogical skills; (E.) Sufficient prior experience in medical education and/or clinical practice, as appropriate; (F.) Membership and activity in professional organizations; (G.) Appropriate publications and research activity; (H.) Ability and desire to communicate with and counsel students; and (I.) Excellent personal character, reputation, and references.

The Secretaria de Educacion Publica (SEP), the accrediting agency in Mexico, and UAG practice call for the appointment of all faculty members as “Professors” with no graduation of rank. Teaching effectiveness, postgraduate and graduate education, experience, length of tenure, research and publications, and distinctions and honors all have a bearing on a professor’s compensation. The variations of compensations indirectly constitute a ranking of faculty.

There is an Office of Education in the Health Sciences that is responsible for improving faculty teaching techniques and skills. Each faculty member is regularly observed and evaluated from a technical standpoint by staff from the Secretaria de Educacion en Ciencias de la Salud (Office of Education in the Health Sciences). The observations and evaluations by this office lead to customized improvement of teaching and teaching programs.

The department chairperson is responsible for regularly evaluating the performance of each member of his faculty and discussing each evaluation with the person in question. This occurs annually. Involved in this evaluation are student evaluations, and evaluations by the Director of Education in the Health Sciences, as well as publications, continuing education, and research, when applicable.

Adjunct faculty is a term to designate those members of the faculty who perform their duties outside of the university campus area and is to precede the rank of the individual.

The School appoints the adjunct faculty from the staff of the cooperative hospital affiliates when it is deemed appropriate. There is a minimum of one appointment at each affiliated hospital. Modified criteria of appointment to the adjunct faculty have been developed. The exception to this is those public hospitals in Mexico where the relationship between them and medical schools is defined and controlled by law, which law established academic and supervisory positions and mandates their functions in the various clinical rotations and programs of medical education.

The standing committees of the faculty are: Executive Committee; Committee on Committees; Committee on Curriculum; Committee on Academic Standing; Committee on Research; Committee on Libraries; Committee on Faculty Appointment and Promotion; Committee on Faculty-Student Relations; Committee on University Admissions (Mexican Students); Committee on University Admissions (Foreign Students); Committee on Clerkships, Guardias, and Internado; and a Special Committee on the Cooperative Medical Education Program.

STUDENTS

According to the Data Base Document, a total of 2,118 students were enrolled in the University's program of medical education. Of that number, 545 were first year students, 366 second year students, 301 third year students, 241 fourth year students, 346 fifth year or internship students and 319 sixth year or social service students. Mexican students constituted 76 percent of the total enrollment; U.S. nationals constituted 14 percent and "others" 10 percent.

Enrollment for the past five years for the first to fourth years was:

SCHOOL YEAR	1ST YEAR STUDENTS	2ND YEAR STUDENTS	3RD YEAR STUDENTS	4TH YEAR STUDENTS	TOTAL
1990	525	416	432	306	1679
1991	427	466	353	348	1594
1992	421	353	372	350	1496
1993	455	342	278	360	1435
1994	550	404	327	337	1618

The catalog described the admissions process as follows: “Applicants from the United States must meet all the basic premedical requirements necessary for entrance into a U.S. medical school. This means that the applicant must have a minimum of 16 semester credit hours in chemistry (eight inorganic and eight organic), eight semester credit hours in physics, and eight semester credit hours in biology.” These requirements vary from state to state.

A minimum of 90 semester credit hours is required for acceptance, but obtaining a bachelor’s degree is urged in the strongest terms. Having an undergraduate degree confers several definite advantages, mainly to the UAG student who wants to return to the United States through the Fifth Pathway Program. The applicant must also have taken and passed the Medical College Admissions Test (MCAT) within the past three years.

As a general rule, the Committee on University Admissions (of Foreign Students) to the School of Medicine requires applicants to have a 3.0 cumulative grade-point average and above-average scores on the MCAT. However, the simple review of numbers is not a sufficient indicator of an applicant's potential to become a good physician. The Committee looks for other qualities as well. The School of Medicine reserves a small number of positions for those students who may not meet the basic academic requirements related to the grade-point average or MCAT scores. To be accepted, however, such individuals will have to demonstrate extenuating circumstances for their less-than-competitive academic records through their work history, undergraduate record, other activities, and their personal interview. Such applicants must possess outstanding personal characteristics and dedication to the pursuit of a medical career.

All applicants must demonstrate qualities of maturity, industriousness, commitment to medicine, and high ethical standards. Cultural sensitivity and adaptability round out those traits that are recognized as essential for each UAG medical student.”

According to the Faculty Handbook, students will be permitted to carry two subjects from the first to fourth semester. No student will be able to carry any subjects after the beginning of the fourth semester. Students will not be permitted to begin the third year while carrying deficits from previous years. Students will be granted the opportunity to remedy individual course deficiencies as outlined in the students manual. Special arrangements may be made between the student and the departmental or course faculty for completion of the course requirement. Recommendations regarding a students pattern of deficiency are reserved to the Committee on Academic Standing, and shall be

presented to the Dean for final action. In certain specific instances, particularly those involving ethics or moral code, the Dean forwards his decision to the University Committee on Honor and Justice. The student is notified of decisions affecting him by the Committee on Academic Standing or the University Committee on Honor and Justice.

During the visit, the team met with two groups of students from both the preclinical and clinical semesters. The students impressed the team as being sincere, intelligent, and highly motivated. The students in the clinical semesters were also fluent in Spanish. The students expressed satisfaction with the coursework, both in breadth and depth. The clinical students said the preclinical coursework was excellent preparation for their clerkships.

CURRICULUM

The entire program leading to the final degree covers 261 weeks distributed as follows: 37 weeks in the first year; 40 weeks each in the second, third, and fourth years; and 52 weeks each in the internado and servicio social years. At the end of the first four years, a student receives the “Medico Cirujano” (Physician-Surgeon) Diploma. The “Examen Profesional” (Professional Examination) may be taken anytime following the completion of the internado. Upon completion of the servicio social (social service) year

and upon passing the Examen Profesional, a student is awarded the medical degree: ‘Titulo de MedicoCirujano’ (Degree of Physician-Surgeon).

First Semester: Human Anatomy; Biochemistry; Human Embryology; Cell Biology; Introduction to the Medical Practice; Introductory Course in Learning-Skills Development and Psychological Support; Community Medicine I; Genetics; and Introduction to the Computer.

Second Semester: Human Physiology; Human Histology; Behavioral Sciences-Humanistic Medicine and Medical Psychology; Public Health; Preventive Medicine; Immunology; Clinical Skills Development; Community Medicine II; and Political and Social Problems of Mexico;

Third Semester: Microbiology/Parasitology; Pharmacology; Neuroscience; Surgical Education and Techniques; Introductory Pathophysiology and Clinical Practice; Toxicology; Nutrition; and Community Medicine III. Pathology; Pathophysiology; Clinical Practice; Community Medicine IV; ices Correlation, Integration, and Review Course.

Fifth Semester: Internal Medicine and Psychiatry.

Sixth Semester: Obstetrics and Gynecology; Pediatrics; and Surgery.

Eighth Semester: Surgery and Obstetrics-Gynecology Electives.

The team reviewed the objectives and outlines of each course in the curriculum. Each was found satisfactory. Attachment A provides additional information about the preclinical courses.

An intensive Spanish course consisting of seven levels is available for international students. Each level is four weeks long, four hours a day for five days a week. Students having knowledge of Spanish can take a placement examination and be placed in an appropriate level corresponding to their proficiency in the language.

The basic science coursework is very comprehensive, emphasizing the clinical aspects of the subject matter. Numerous student and faculty critiques of the courses permit easily implemented modifications to the curriculum. The course instructors are knowledgeable about the subject matter and well prepared to teach their respective courses. Extra sessions with faculty for remedial and tutorial work are readily available.

The scientific and humanistic content of the courses is comprehensive and equips a student with the background necessary to enter the American system of the practice of medicine. The team agreed unanimously that the preclinical coursework prepares a student to engage in clinical clerkships in New York State.

According to the catalog, 'The University recognizes the benefits accruing to its U.S. students if they are prepared to enter the mainstream of American medicine with as few adjustment problems as possible. In 1978, therefore, the UAG began establishing working agreements with U.S. teaching hospitals where adequate control could be assured

in setting up, operating, and monitoring quality clerkship programs for its fourth-year American students. The Co-op Program is the framework within which the UAG School of Medicine accomplishes this.”

The stated objectives of the clinical program in the United States are:

- A. To give the medical students greater exposure to U.S. direct bedside teaching at selected facilities;
- B. To offer students an opportunity to begin integration into medicine in the United States during undergraduate training;
- C. To allow undergraduate students an opportunity to enter graduate education with greater U.S. clinical experience; and
- D. To promote the exchange of ideas between United States and Mexican academicians, resulting in greater understanding and in the improvement of the quality of medical education, facilities, and training programs in both countries.

The fourth year clerkships available under the clinical program are:

Medicine During the medicine clerkship, the student is expected to acquire the skills of data collection (history, physical examination, laboratory assessment) at a level consistent with the solution of common patient problems. This is achieved through initial contact for 12 weeks with patients admitted to the general medical units. In all exercises, the student is closely “supervised by faculty and senior house staff.

Psychiatry The psychiatry clerkship is based primarily on the in-patient unit, and the student is expected to participate and become an integral part of the treatment team. Although there is a variation between sites, an equivalent of one week may be spent in the outpatient clinic. In addition, exposure to consultation-liaison psychiatry and emergency coverage are arranged. Child psychiatry exposure is provided if available.

The student is given the opportunity to admit, evaluate, and become familiar with the clinical manifestations of patients in the inpatient unit. Teaching involves didactic lectures and seminars, individual supervision, teaching by psychiatric preceptors, and immediate case supervision by psychiatric staff in the inpatient unit. In addition, the student attends ward rounds, case conferences, regularly scheduled grand rounds, and other educational activities at the clinical sites.

Obstetrics and Gynecology

The six-week clinical clerkship in obstetrics and gynecology presents an opportunity for the student to become intimately involved with the ambulatory and hospital care of female patients with pregnancy and/or diseases of the reproductive tract. It is designed to appropriately ground students in obstetrics and gynecology regardless of the specialty they

ntually enter. The medical complications of pregnancy, workup of infertility, normal
~strual cycle, etc., are stressed.

Student evaluations are primarily based on clinical functioning. This includes ability at history taking and physical examination; diagnostic acumen; clinical aptitude; growth in technical skills; ability to function within a hospital environment and to perform certain responsibilities; interaction with attending physicians, residents, nurses, and patients; and a

willingness to accept responsibility for patient care and for self-education by independent reading in assigned clinical problems.

Surgery

The clerkship in surgery aims to prepare all students to be able to analyze surgical problems, to recognize and meet emergency situations, and to understand the diagnosis and management of common surgical diseases. Students are provided experiences with both in-patient and out-patients, giving them opportunities for acquiring sound habits of case study, analysis of problems for decision-making, independent search for pertinent information, and the development of effective doctor/patient relationships.

Each student has an opportunity to have eight weeks of general surgery in the eighth semester. The student is assigned usually to one surgical service. The entire

clerkship includes assignment as part of the clinical care team, which includes attendings, residents, subinterns, and clinical clerks. The students function as members of the care team by performing histories and physicals, daily progress notes, assessment of patient's condition, participation in the operating room, and functioning in clinics. In addition, students are provided lectures covering basic surgical topics and are encouraged to follow reading lists. Students are expected to attend departmental conferences and teaching rounds.

During their rotation, the students receive six weeks of experience divided between pediatric in-patients, clinic, and the emergency room. Students also receive exposure to the newborn service, during which time they will examine newborn infants and participate in the well-baby clinic. In the course of the clerkship the student attends all conferences and receives a lecture series on a range of topics in pediatrics and neonatology. Students may also be assigned on a regular basis to emergency and night admissions.

The student participates in patient care as part of a team composed of the senior and/or junior residents, attending physician, and chief of the department. The emphasis is on the scientific basis of pediatric practice, pathophysiology, and the preventive potential of pediatrics. The family as a nurturing unit is stressed.. Special emphasis is placed on history-taking and the interpretation of physical signs of disease and of growth and development (up to December 1995).

Starting January 1996, the fourth year clinical clerkships will be available as follows: Internal Medicine, 10 weeks; Pediatrics, 10 weeks; Ob/Gyn, 10 weeks; and Surgery, 10 weeks. These will follow the same outline as previously described. The Psychiatry clerkship will be given in the third year.

As described in the Student Handbook, “Responsibility for this program lies with the Dean of the School of Medicine. The Dean appoints a Medical Director of the Co-o program. The Medical Director is permanently located at the UAG office in the United States, in San Antonio, Texas. He is responsible for the academic portion of the program, as well as hospital visitations. Hospital visitations are made during the semester by the Medical Director and members of the U.A.G. Medical Faculty for the purpose of evaluating the progress of the students and to ensure adequate [sic] implementation and effective operation of the program.

The Office of the Assistant Dean of International Programs/Clinical Area in Guadalajara, is responsible for the administration of the program, including receiving the applications for participation in the Co-o Program and counseling students. Students problems, once the students are physically in the United States, are handled by the Medical Director and his staff in the San Antonio Office.”

The University’s Cooperative Medical Education Program Handbook explained that ‘The Medical Director of the Co-op Program visits each hospital at least semiannually, usually accompanied by faculty representation and/or Consultant. The Consultant visits Coop hospitals as necessary and otherwise remains in close communication with them throughout the year. Faculty members supervise direction and problems, as they arise, are solved. During these visits, performance of individual students is discussed and meetings take place with department directors who are adjunct faculty members. School-based faculty

also aid in evaluating the quality of teaching and supervision. The Director of Medical Education and clinical director at each of the Co-op hospitals are expected to attend periodically-held conferences in Guadalajara and/or in the U.S. as scheduled by the school.”

The Clinical Program in New York

On September 4, 1995 Autonomous University of Guadalajara executed an affiliation agreement with Maimonides Medical Center, 48002 Tenth Avenue, Brooklyn, New York 11219. According to the agreement, the University will select and assign to Maimonides students qualified to engage in clerkships at the Hospital. As provided by the agreement:

1. The Medical Director of the Cooperative Medical Education (Co-op) Program at SCHOOL will provide the Director of Medical Education or department equivalent (DME) of HOSPITAL with a syllabus, curriculum, and a course outline.
2. SCHOOL accepts the grading and evaluation of each Department Chairman at

HOSPITAL

3. The Medical Director, Co-op Program at SCHOOL and the DME at HOSPITAL will assure that all instruction of the students at HOSPITAL is satisfactory to SCHOOL and such will be effectuated by reviewing course syllabi, by SCHOOL examinations of returning students, by on-site visits of key staff to observe the training of students, and discussion of the training with HOSPITAL staff and the students, and by other methods.

4. HOSPITAL shall adhere to and comply with the requirements and stipulations of SCHOOL for administration and supervision of the program and students assigned to it.

5. The HOSPITAL DME or departmental equivalent is responsible for establishing an effective program to satisfy and effectuate the aims and goals of the Co.op Program prescribed by SCHOOL.

6. Periodic and timely submissions of reports evaluating the students' performance will be filed by the department head or the DME.

The HOSPITAL DME is responsible for providing competent supervision of the students in clinical duties. No student shall work unsupervised or be required or requested to perform duties or be assigned responsibilities that are not commensurate with the student's level of scholastic achievement.

7. The DME will assure that only physicians with requisite academic and clinical training will act as supervising instructors and take part in the various aspects of

clinical training of the students, appropriate lectures, conferences, ward rounds, seminars, and bedside instruction. The DME will provide to the Medical Director, Co-op Program of SCHOOL the curriculum (CVs) of all proposed adjunct faculty at least 30 days prior to the beginning of each new semester.

8. The Director of Medical Education or The Chairperson of the clinical department at the affiliated hospital will maintain an evaluation file on all adjunct faculty members of the affiliated hospital and will immediately notify the Associate Dean of the Clinical Area of any change in the status of an adjunct faculty member.

The agreement stipulates that the Hospital will provide seventh semester 10 week clerkships in internal medicine and pediatrics for a maximum of five students.

During its visit to the hospital, the team met with Kathryn M. Lane, Ed.D., the Hospital's Vice President of Academic Affairs and the University's Director of Medical Education at the Hospital; Jerome Tepperberg, M.D., the University's Preceptor for Pediatrics, Clerkship Coordinator for Pediatrics, and adjunct Professor of Pediatrics; and Edgar Lichstein, M.D., Chairman of the Hospital's Department of Medicine and a University Adjunct Professor of Medicine. Richard Funaro, M.D., the University's Clerkship Coordinator and Preceptor for Medicine at the Hospital and Malcolm Rose, M.D., a

Preceptor for Medicine, also met with the team. Drs. Lane, Tepperberg, Lichstein, Funaro, and Rose described their responsibilities vis-a-vis the Hospital and the University.

Dr. Lane explained that Maimonides Medical Center is a not-for-profit, non-sectarian, voluntary hospital affiliated with the Federation of Jewish Philanthropies. It is a major teaching affiliate of the State University of New York Health Science Center at Brooklyn and the New York College of Osteopathic Medicine. There are 22 accredited residency and fellowship programs, 200 full-time faculty, 600 voluntary faculty, and over 400 residents.

Dr. Tepperberg said that currently the Hospital provides third year Pediatric clerkships for students from the SUNY Health Sciences Center at Brooklyn, the New York

College of Osteopathic Medicine (NYCOM), and St. George's University School of Medicine

(SGUSOM). The SUNY students have a four week rotation; the clerkship for NYCOM and

SGUSOM students is six weeks.

Dr. Lichstein provided an overview of the third year clerkship in Medicine. Dr. Funaro, a graduate of the Universidad Autonoma de Guadalajara, shared with the team his experiences as a student and as a resident in New York State.

Currently there are 12 students in the third year core rotations. The number of students in the fourth year, a subinternship year, is variable. The subinternships for the

Guadalajara students will encompass areas not covered in the core clerkships completed in Mexico.

The team concluded the Hospital is well equipped in terms of physical resources, faculty, and academic experience to provide clerkship training for students enrolled in the Universidad Autonoma de Guadalajara.

SUMMARY

Based on its observations and findings, the team concluded the program of medical education of the Universidad Autonoma de Guadalajara, is functioning effectively, students are prepared to engage in clinical clerkships in New York State, and a satisfactory clinical training program has been established at Maimonides.

The team noted that significant positive changes have occurred since the last site visit. In particular, the expansion of physical facilities was impressive.

With respect to the preclinical curriculum, the team made the following observations:

1. The structure for the governance of the University and the Medical School is defined clearly and understood by the administrators, faculty, and students.
clearly.
3. The process by which students are selected for admission are stated clearly.
4. The number of faculty is adequate to teach the courses in the curriculum at the current level of enrollment.

5. The faculty is composed of a representative number of disciplines and medical specialties.

6. The faculty are well prepared, enthusiastic, and strongly motivated to helping students.

7. The library collection is adequate to support the program of medical education and computer assisted instruction is available to supplement the coursework. The students are instructed in the critical analysis of medical literature.

8. The supplemental materials prepared by the faculty for students are superb.

9. The supply of cadavers is adequate.

10. Laboratory resources and the number of microscopes are adequate.

11. An appropriate student faculty ratio assures effective instruction.

12. Curricular goals and objectives, similar to those common to medical schools in the United States, are clear and cohesive.

13. Preclinical and clinical faculty and student evaluators of the coursework have molded a dynamic curriculum that is easily adaptable to the changing needs of students.
14. Students have access to clinical materials during all phases of the preclinical curriculum.

In order to increase the effectiveness of the program, the team recommends that (1) the University provides a profile of each student to the Hospital, including academic and personal information and that the Hospital provide a detailed description of the student's performance to the University; (2) the syllabus be reviewed in cooperation with the Hospital to insure that learning objectives are specific and understood by every individual in the teaching program; and (3) that key persons at the Hospital have the opportunity to visit the campus in Guadalajara.

Although the current number of faculty is adequate to teach the current enrollment, the stress that increased enrollment may place on faculty could be a major problem and should be carefully monitored. The team recommends that the University provide the Department with a report focusing on enrollment trends and the faculty situation in approximately 24 months and that an interim visit be considered should conditions warrant as determined by the Department.

PRECLINICAL COURSES

Human (Gross) Anatomy is offered in the first semester. There are five 100 minute didactic meetings per week for 16 weeks. There are 30 laboratory sessions per semester (two 50 minute sessions per week). Textbook(s): Clinically Oriented Anatomy, by K.L Moore; Dissector Manual for CIBANETTER Atlas of Human Anatomy, Atlas of Human Anatomy (CIBANETTER Collection); Gross Anatomy in the Practice of Medicine, by Frank Slaby et al; Anatomy (Wiley's Series) by April; Review of Anatomy, by K.L Chung; and Dissection Manual by Jack L Wilson.

The medical school has 150 cadavers, 48 of which are used in the course. There are six students per cadaver per lab period, 18 cadaver tables, six student seats and six bench spaces.

Biochemistry is offered in the first semester. There are five 100 minute didactic meetings per week for 16 weeks. There are no laboratory sessions. Textbook: Biochemistry. Edited by T.M. Devlin.

Human Embryology is offered in the first semester. There are five 100 minute didactic meetings per week for 5.2 weeks. There are no laboratory sessions. Textbooks(s): The Developing Human/Keith L. Moore & Embryology/James D. Fix.

Cell Biology is offered in the first semester. There are five 100 minute didactic meetings per week for 3 weeks. There are no laboratory sessions. Textbook: Cell Biology by D'Robertis.

Introduction to the Medical Practice is offered in the first semester. There are two to three 50 minute didactic meetings per week for 16 weeks and 32 laboratory sessions (three 50 minute sessions per week). Textbook: Alomia y cols. Gufa para el Desarrollo y Pr~cticas de Habilidades Clinicas, Vol.1. U.A.G.; H.K.. Walker, M~todos Clfnicos. Ed. Interamericana.

Introductory Course of Psychological and Pedagogic Support consists of three 100 minute didactic meetings for one week. There are also three 280 minute laboratory sessions. There is no text.

Medicine in the Community I is a six week course offered in the first semester. There are six laboratory sessions, one 240 minute session per week. The students undertake clinical practice with patients to demonstrate the knowledge acquired in the classroom, in the process promoting clinical reasoning. The academic activities are evaluated by checklists. Textbook: McBryde, Blacklaw; Signos y Sintomas, Sta. Ed. Suros; Semiologfa, Medicina y T~cnicas Exploratorias, Ed. Salvat.

Genetics is a four week course offered in the first semester consisting of five 100 minute didactic meetings per week. There are no laboratory sessions. Textbook: Medical Genetics/Nora and Fraser/4th Edic/LEA & Febiger.

Introduction to Computation is offered in the first semester. There are three to five 50 minute didactic meetings per week for 12 weeks. There are 29 laboratory sessions (three to five 50 minute sessions per week. There is no text.

Human Physiology is offered in the second semester. There are ten 50 minute didactic meetings per week for 13 weeks. There are no laboratory sessions. Textbook(s): Guyton's Textbook of Medical Physiology; Vander's Renal Physiology; West's Respiratory Physiology.

Human Histology is offered in the second semester. There are five 100 minute didactic meetings per week for eight weeks. There are 17 laboratory sessions (three 100 minute sessions per week). Textbook: Basic Histology/L.C. Junqueira-J. Carneiro-R.O. Kelley.

Behavioral Sciences (Medical Psychology and Humanistic Medicine) consists of five 100 minute didactic meetings for seven weeks in the second semester. There are no laboratory

sessions but students have one 3 hour Clinical Supervised Practice at the Psychiatric Hospital. Textbook: Synopsis of Psychiatry/Kaplan and Sadock/Seventh Edition.

Preventive Medicine and Public Health is a nine week course offered in the second semester for five 50 minute didactic meetings per week. There are no laboratory sessions. Textbook: Preventive Medicine and Public Health by Brett J. Cassens (Wiley Medical).

Immunology is offered in the second semester. There are ten 50 minute didactic meetings per week for four weeks. There are no laboratory sessions. Textbook: Immunology, 3rd Edition, Roitt, Brostoff, Male.

Development of Clinical Skills is offered in the second semester. There are two to three 50 minute didactic meetings for 18 weeks. There are 36 laboratory sessions (two to three 50 minute sessions per week). Textbook(s): Alomia. Guía para Desarrollo y Prácticas de Habilidades Clínicas, Nivel 1 y

2. U.A.G.; Harrison. Principios de Medicina Interna. Ed. Interamericana.

(Note: The objectives and outline are the same as those set forth in the Latin Program).

Medicine in the Community II covers 12 weeks in the second semester. There are no didactic meetings but there are 12 laboratory sessions, (one 240 minute session per week). The students undertake clinical practice with patients to demonstrate the knowledge acquired in the classroom, in the process promoting clinical reasoning. The academic activities are evaluated by checklists. Textbook(s): McBryde, Blacklaw; Signos y Sfantomas, Sta. Ed. Suros; Semiologia, Medicina y Técnicas Exploratorias, Ed. Salvat.

General Pathology is a six week course offered in the second semester, consisting of five 100 minute didactic meetings per week and 10 laboratory sessions (five 30 minute sessions per week). Textbook: Pathology of Robbins by Rubin.

Microbiology and Parasitology is offered in the third semester. There are ten 50 minute didactic meetings per week for 10 weeks. There are no laboratory sessions. Textbook: Zinsser Microbiology. Joklik, Willett, Amos.

Pharmacology is offered in the third semester. There are four to five 120 minute didactic meetings for 16 weeks. There are no laboratory sessions. A Bibliographic report is prerequisite to the final exam. Textbook(s): Goodman and Gilman, Pharmacological Basis of Therapeutics; Bertram Katzung, Basic & Clinical Pharmacology.

Neurosciences (Neuroanatomy, Neurophysiology and Neuropharmacology) is offered in the third semester. There are five 100 minute didactic meetings for 10 weeks and 12 Neuroanatomy laboratory sessions (two 50 minute sessions per sessions per week). Textbook(s): Core Text Neuroanatomy by M. Carpenter; Clinically Oriented Neuroanatomy and Neurophysiology by Manter and Gatz; Nervous System (CIBA COLLECTION, Netter) Neuroanatomy (Board Review Series) by J. Fix; Neurosciences by W. Westmoreland; Neurosciences Coloring Review Book by M. McKeough; Physiology by Guyton; Pharmacological Basis of the Therapeutics by Goodman; Basic and Clinical Pharmacology by Katzung.

Surgical Education and Techniques is a 19 week course consisting of one 180 minute didactic meetings per week in the third semester. There are also 17 laboratory sessions (one 180 minute session per week). There are 27 hours of practice with animals, 3 hours per week of personalized tutorial not included in the course, and videotapes that the students can use in the library. Textbook: Abel Archundia, M.D. Educación y Técnicas Quiriirgicas (consultation text book).

Notions of Physiopathology and Propedeutics is a third semester course consisting of two to three 50 minute didactic meetings for 18 weeks. There are 21 laboratory sessions (one to two 50 minute sessions per week). Textbook(s): Alomfa y cols. Gufa para el Desarrollo y Pr~cticas de Habilidades Clinicas. Vol. 1,2,3. U.A.G., Harrison. Principios de Medicina Interna, Ed. Interamericana.

Toxicology is a one week, five 100 minute didactic meeting course offered in the third semester. There are no laboratory sessions. Textbook(s): Bertram Katzung, Basic and Clinical Pharmacology; Viciello J., Handbook of Medical Toxicology (little Brown Series).

Nutrition is offered in the second semester and consists of five 50 to 100 minute didactic meetings a week for five weeks. There are no laboratory sessions. Textbook: Nutritional Biochemistry and Metabolism by M.C. Under.

Medicine in the Community III consists of one 240 minute laboratory sessions for nine weeks. There are no didactic meetings. The students undertake clinical practice with patients to demonstrate the knowledge acquired in the classroom, in the process promoting clinical reasoning. The academic activities are evaluated by checklists. Textbook(s): McBryde, Blacklaw; Signos y Sintomas, 5ta. Ed. Suros; Semiologia, Medicina y Técnicas Exploratorias, Ed. Salvat.

Pathologic Anatomy is offered in the fourth semester. There are five to ten 50 minute didactic meetings for 18 weeks and 30 laboratory sessions (ten 30 minute sessions per week). Textbook: Pathology by Robbins or Rubin.

Pathophysiology and Medical Propedeutics is a fourth semester course consisting of eleven 50 minute didactic meetings for 16 weeks and 75 laboratory sessions (fifteen 50 minute sessions per week). There are 20 hours of special Group Activities (Interaction). The objectives and outline of Medical Propedeutics are the same as those set forth in the Latin program. Textbook(s): Principles of Internal Medicine by Harrison; Bedside Physical Diagnosis by De Gowin; Manual de Procedimientos by H. Alomfa.

Medicine in the Community IV consists of ten 240 minute laboratory sessions for ten weeks. There are no didactic meetings. The students undertake clinical practice with patients to demonstrate the knowledge acquired in the classroom, in the process promoting clinical reasoning. The academic activities are evaluated by checklists. Textbook(s): McBryde, Blacklaw; Signos y Sintomas, Sta. Ed. Suros; Semiología, Medicina y Técnicas Exploratorias, Ed. Salvat.