



**Committee for the Evaluation of Medical Schools\_in Israel**

**Ben-Gurion University**  
**Faculty of Health Sciences, Medical Schools**  
Evaluation Report

**June 10, 2014**

## **Contents**

<b>Chapter 1:</b>	Background.....	3
<b>Chapter 2:</b>	Committee Procedures.....	4
<b>Chapter 3:</b>	Evaluation of the medical study programs at Ben-Gurion University .....	5
	<b>Chapter 3A:</b> Outline of observations and findings.....	5
	<b>Chapter 3B:</b> Full observations, findings, and Recommendations.....	12
<b>Chapter 4:</b>	Collected recommendations.....	37
<b>Appendices:</b>	Appendix 1 – Letter of Appointment .....	45
	Appendix 2 - Schedule of the visit.....	46

## **Chapter 1- Background**

The Council for Higher Education (CHE) decided to evaluate the study programs in the field of Medicine during the academic year of 2014.

Following the decision of the CHE, the Minister of Education, who serves ex officio as Chairperson of the CHE, appointed a Committee consisting of:

- Prof. Stephen Schoenbaum – The Josiah Macy Jr. Foundation, New York, USA: Committee Chair<sup>1</sup>
- Prof. Raymond H Curry – Northwestern University Feinberg School of Medicine, Illinois, USA
- Prof. Shimon Glick- Professor emeritus in medicine, Faculty of Health Sciences, Ben Gurion University of the Negev, Israel <sup>2</sup>  
Prof. Peter Crome- School of Medicine, Keele University, United Kingdom
- Prof. Elliot Gershon - Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Illinois USA
- Prof. David Katz – Professor Emeritus of Immunopathology, Faculty of Medical Sciences, University College of London, United Kingdom
- Prof. Ora Paltiel- Attending Physician, Department of Hematology- Hebrew University Hadassah Medical School, Hebrew University<sup>3</sup>
- Prof. Jo Shapiro – Harvard Medical School, Harvard University, Massachusetts, USA

*Ms. Daniella Sandler- Coordinator of the Committee on behalf of the CHE.*

Within the framework of its activity, the Committee was requested to:<sup>4</sup>

1. Examine the self-evaluation reports, submitted by the institutions that provide study programs in Medicine, and to conduct on-site visits at those institutions.
2. Submit to the CHE an individual report on each of the evaluated academic units and study programs, including the Committee's findings and recommendations.
3. Submit to the CHE a general report regarding the examined field of study within the Israeli system of higher education including recommendations for standards in the evaluated field of study.

The entire process was conducted in accordance with the CHE's Guidelines for Self-Evaluation (of October 2012).

---

<sup>1</sup> Prof. Schoenbaum's concomitant position as chair of Ben Gurion Medical School's International Advisory Review Committee (IARC or Goldman Committee) was reviewed by the CHE prior to his appointment, and deemed not to be in conflict with his role as chair.

<sup>2</sup> In accordance with the CHE's policy, Prof. Shimon Glick did not participate in the evaluation of BGU to prevent the appearance of a conflict of interests.

<sup>3</sup> In accordance with the CHE's policy, Prof. Paltiel- Clarfield did not participate in the evaluation of BGU or HUJI to prevent the appearance of a conflict of interests.

<sup>4</sup> The Committee's letter of appointment is attached as **Appendix 1**.

## **Chapter 2-Committee Procedures**

The Committee held its first meetings on 23 February, 2014, during which it discussed fundamental issues concerning higher education in Israel, the quality assessment activity, as well as all medical Study programs in Israel.

During March 2014, the committee conducted multi-day visits at Ben Gurion University of the Negev and the Technion. In May and June 2014, committee members visited, Hebrew University, Tel Aviv University and the Bar Ilan University campus in Tzefat. During the visits, the Committee met with various stakeholders at the institutions, including management, faculty, staff, and students.

This report deals with the Ben-Gurion University of the Negev's Joyce and Irving Goldman Medical School (the Goldman School) and the Medical School for International Health (MSIH). The Committee's visit to the school took place between the dates 24-26.2.2014. The schedule of the visit is attached as **Appendix 2**.

The Committee thanks the management of Ben Gurion University and the Medical School for their self-evaluation report and for their hospitality towards the committee during its visit at the institution.

The format of this report is the following: Chapter 3A outlines the Committee's observations and findings, but not its recommendations. Chapter 3B contains a full narrative of the Committee's observations, findings, and recommendations. Chapter 4 is a collection or aggregation of the Committee's recommendations. Chapters 3A, 3B, and 4 are organized in the following sections: Organizational structure; Mission and goals; Study programs; Human resources/faculty; Students; Teaching and learning outcomes; Research; Infrastructure; Self-evaluation process; and Additional comments. Readers may choose to read the entire report (recommended); or Chapters 3A and 4; or Chapter 3B.

## **Chapter 3: Evaluation of the Medical Study Programs at Ben Gurion**

### **University of the Negev**

*This Report relates to the situation current at the time of the visit to the institution, and does not take account of any subsequent changes. The Report records the conclusions reached by the Evaluation Committee based on the documentation provided by the institution, information gained through interviews, discussion and observation as well as other information available to the Committee.*

### **Chapter 3A: Outline of Observations and Findings**

The Committee evaluated Ben-Gurion University of the Negev's Joyce and Irving Goldman Medical School (the Goldman School) and the Medical School for International Health (MSIH). The Goldman medical school is a 6 year program that grants a degree of Bachelor in Medical Sciences (B.Med.Sc.) after three years of study and a Doctor of Medicine (M.D.) after 6 years of study followed by a year of internship; whereas, MSIH, a collaboration with Columbia University, is a four year program based on the North American model that awards an M.D. degree after four years to students, primarily from outside Israel, who already have baccalaureate degrees.

1. Organizational Structure:
  - a. Though the two schools draw upon the same pre-clinical and clinical faculty pool, each has its own Vice Dean who reports directly to the Dean of the Faculty of Health Sciences.
  - b. It is the Committee's impression that there is an excellent and collegial working relationship between students, faculty, and administrative leadership in each school.
  - c. Because medical education involves studies in traditional academic settings and significant educational activities in clinical settings, and funding streams for academia and clinical care are separate, resource allocation to any medical school is complicated. There is the fact that medical education includes both non-clinical education in a traditional academic setting and clinical education in institutional (hospital), ambulatory (clinic or office), and other settings. The Committee feels that resource allocation in Israel in general and specifically at BGU should be re-examined. The strength of BGU in its region and the particular geographic and population characteristics of the Negev region suggest that there could be important pilot programs of resource allocation there leading to better education of health professionals and better health care.
2. Mission: The mission of the Goldman School is to embody the Beer Sheva spirit as characterized by attending to each patient's bio psychosocial needs; commitment to provide a humanistic approach to care; integrating primary,

tertiary, preventative, and curative care; special emphasis on community-oriented care; commitment to training a diverse group of health care professionals including students from various under-represented populations including the Bedouins and those residents of the development towns; and serving a diverse, disadvantaged population. The special mission of the MSIH is to focus on training global health care providers. The Committee found through its interactions with students, faculty, leaders and administrative staff that the two schools embody their important missions and learned about several specific programs that help in achieving the missions of the schools.

### 3. Study Programs:

- a. The 2007 Council review of the Goldman School found expansion of students' experiences in the ambulatory setting to be a high priority. Since then, the proportion of the clinical curriculum delivered in the ambulatory setting has risen from approximately 25 to 49 percent. There are, however, still no substantive longitudinal clinical experiences.
- b. Additional opportunities for early clinical exposure have also been added since the last review. Clinical faculty now provide 37, 52, and 90 percent of teaching contact hours in the 1st, 2nd and 3rd years, respectively, in the Goldman School.
- c. The MSIH curriculum follows the traditional "2+2" North American model, but there is an emphasis on global medicine issues in the two preclinical years. The third year core clinical clerkships are conducted almost entirely at Soroka and Barzilai hospitals. Each clerkship includes one day of subject-relevant global health perspectives. During the 4th year students complete four to five electives in North America, usually including some at Columbia University sites in New York City and two months at one of a number of global rotation sites maintained by BGU. There is no thesis requirement for graduation.
- d. Both MD programs rely primarily on frontal lectures. There are appropriate opportunities for reflective writing and discussion in the courses addressing medical ethics and professional development.
- e. The Committee's impression was that students found most course syllabi to be superficial, with insufficient detail to guide them in their reading prior to class or help them prioritize the material afterward. The lack of specific, published learning objectives also makes it difficult to link the curriculum to well-defined formative and summative assessment strategies. Learning objectives and use of a broader set of assessment methods will be necessary if the school is to work toward adopting the competency-based outcomes assessment rubric now implemented in the United States and United Kingdom.
- f. The MD/PhD program attracts outstanding students but only one to two per year. The Committee's impression was that the design of this program merits attention to make it truly a combined degree program in

which duplication of course credit requirements is minimized and efforts are made to extend the time for performing research.

4. Human Resources/Faculty: The Committee considered whether the numbers of persons on the Faculty who are involved in education, training, and research are sufficient to ensure that the stated missions and goals can best be achieved.
  - a. A recurring theme from both the Faculty leadership and the persons at the frontline was that there was no protected time for clinically qualified, clinically active people to participate in education, training, and research activities.
  - b. A second, related issue was the reported difficulty in attracting enough clinical professionals to cater to the immediate healthcare needs of the local population. This is an issue both for the hospital and for the clinics outside the main centers where there are reportedly too few family physicians.
  - c. The rejuvenation of the Center for Medical Education is a positive development that appears to signal recognition of the importance of faculty development activities. Nonetheless, the Committee is concerned that given the limitations on faculty time available, participation in formal faculty development programs is likely to remain circumscribed.
  - d. The Committee's impression is that policies relating to summer research placements for students, their financing and relationship to the compulsory research thesis and to recruitment into the MD/PhD program need clarification for both faculty and students.
  - e. The Faculty acknowledged that it is very important for physicians to practice evidence-based medicine and have excellent lifelong learning skills. Although faculty role models were cited as a significant way in which students acquire these skills, the Committee felt that there is a need for more formal documentation of how these values and skills are inculcated.
  
5. Students:
  - a. Admissions to the Goldman School: The standard admission route to the School is based on a threshold score on the "sechem" followed by a two-stage interview process. Students with high scores in previous academic studies who had completed either two years of higher education or completed a Bachelor's degree or two years of study can be interviewed with a slightly lower "sachem". And, there are two additional admissions routes for students from disadvantaged backgrounds. 1) One or two students each year with a "sachem" 5 percent lower than the usual threshold are admitted from development towns. 2) One or two students are admitted via the "Buds of Medicine in the Negev" enrichment program for Bedouins.

- i. The interviews each involve two faculty members and last about an hour. The Committee regarded this two stage interview process as labor intensive and wondered whether there was any evidence that the Goldman approach was superior to that of the other schools that use a multiple mini-interview-type evaluation in a simulation center.
      - ii. The Committee was gratified to be told that the students from disadvantaged backgrounds performed well during their clinical studies.
    - b. Applicants to the MSIH program have to complete a North American four year college degree course including pre-med science courses. Those meeting academic criteria described as “high grades” and a MCAT of 30 or above are interviewed by two faculty members at Columbia University in the USA.
    - c. The retention rates for admitted students are high.
    - d. In general, the students rated their learning experiences throughout the course of study highly, more so in the clinical years. They liked their early clinical experiences, the collegial atmosphere in the school, and the easy access to their teachers.
      - i. They reported that the quality of the lectures could be improved by using more advanced technological approaches.
      - ii. Students appreciated the long-term mentoring system in which they could discuss personal or academic issues with a member of the faculty.
6. Teaching and Learning Outcomes:
- a. Student assessment of teaching methods has already been mentioned. The Committee’s impression was that basic scientists, despite having significant teaching responsibilities in the medical school programs and in the other schools with the Faculty of Health Sciences, are not specifically rewarded or prepared for teaching.
  - b. Although the curriculum is said to have a spiral structure, the Committee could not ascertain the degree to which there is planned progression without unnecessary redundancy from basic, to intermediate, to advanced knowledge of a subject or the degree to which there is cross-linkage between the clinical and basic sciences particularly in the clinical years. In the experience of committee members, this issue occurs in medical schools everywhere. One approach to addressing it is faculty development of basic scientists so that they can participate more effectively in clinical teaching settings.
  - c. Elsewhere in the world, outcomes-based approaches such as ensuring that students achieve predetermined clinical competencies vs. spend a certain amount of time in a particular discipline are changing medical education.

- i. There need to be detailed learning objectives for each portion of the curriculum/each course. These should be reviewed with the students at the outset of each course and rotation. Currently these are mostly absent, a fact that was noted by students and the Committee.
- ii. Simulation is a particularly useful tool for practicing skills and interactions and developing high levels of many competencies. The development of a new markedly more sophisticated simulation center should help the Faculty of Health Sciences move further in this direction. Simulation should not, however, be considered the only method for students to acquire or be assessed on acquisition of competences.
- iii. The Committee believes that to move to a competence-based curriculum it is essential to reduce dependence upon multiple-choice examinations that test specific knowledge only, and develop a multi-faceted assessment strategy.
- iv. The Committee did not get a clear understanding of the outcomes of the MSIH program though it understands the almost all students pass the USMLE. It was concerned that MSIH students may not achieve sufficient fluency in Hebrew to read Hebrew medical records and that this might impair their educational experience and can lead to deficits in their proficiency as practitioners after they graduate. The Committee wondered about outcomes of MSIH students when they then obtained residencies, which they do mostly in primary care fields in the US and Canada.
- v. The Committee recognized that some steps have been taken to help students develop life-long learning skills such as early introduction to accessing the literature and exposure to faculty role-models who demonstrate in their actions that they are acquiring new knowledge. The Committee believes, however, that there should be a proactive effort to ensure that students do develop life-long learning skills.

## 7. Research

- a. The Committee's impression is that the career path of the physician researcher is not well-enough laid out. This appears to relate primarily to conflicting demands on time for clinical work, teaching, and research which in turn relates to the ways these activities are funded.
- b. The publication record of the BGU medical school faculty is excellent in both the basic and clinical sciences. The Committee's assessment is that clinical research is strong and well integrated with translational research in several areas, including nutrition and diabetes, as well as in genetics.

8. Infrastructure:

- a. The medical school library presents a couple of issues:
  - i. The Committee feels that most important is whether students can access library materials knowledgeably, rapidly, and conveniently. It believes there is such access owing to the purchases and subscriptions of the Library and their availability online.
  - ii. The Committee feels that student study space is an important aspect of medical education. The impression is that available space is insufficient in two respects: conveniently located physical space and sufficient hours of operation.
- b. The Committee visited the animal facility closest to the medical school building (one of two facilities). The Committee was impressed that it is an advanced, user-friendly, secure facility for animal experimentation and maintenance and commends the recent accreditation of this animal facility.
- c. The existing simulation center has been recognized to be inadequate for the needs of the Faculty and does not have high-fidelity simulation capability. Though plans have been developed for constructing a new Simulation Center, construction has not yet started.
  - i. Because of the importance of simulation for safe acquisition of skills and assessment of competence, it is important to enhance the simulation capabilities of the Faculty as soon as possible.
  - ii. The key issue is having a curriculum plan that enables efficient use of simulation to forward the teaching and learning objectives of the Faculty.
- d. The Committee's impression is that hospital capacity for teaching is already stretched to the limit by the already expanded size of the Goldman School plus the MSIH students. Thus, it questions whether there is enough hospital capacity to handle a further projected increase in the Goldman School class size.
- e. The Committee anticipates several additional infrastructure support issues if there are further increases in class size. These include: Is there sufficient space for lectures, laboratory sessions, and for small group team-based learning? Is there sufficient faculty to support the active learning approaches that seem to work best for young adult learners? Will ambulatory teaching sites and faculty be sufficient? Is the faculty development infrastructure robust enough to handle an increased number of teachers especially if they are using newer teaching methods? Assessment of these is important.

9. Self-Assessment Process:

- a. The Committee noted that a number of the issues that were raised in the report of the committee that the Council for Higher Education appointed to review medical schools in 2007 were addressed successfully.

- b. The Committee understands that the purpose of the Council's Quality Assurance program and processes is to stimulate continuous improvement of the educational programs and institutions it accredits. Continuous improvement generally derives from recognition of problems and potential problems, a commitment to address them, and a specific plan with timelines for doing so. Recognition of problems is facilitated by stating desired outcomes or objectives in advance and by regular surveys of what is happening in other similar places, e.g., current trends in medical education. In short, what is needed is a regular strategic planning, evaluation, and review process.
- c. The Committee noted that the curriculum lacked detailed teaching and learning objectives that would be necessary for such an evaluation.
- d. The Committee did learn about a number of important new programs that the Faculty has started in the past few years. It commends the Faculty for developing such efforts including expanding its teaching in the ambulatory setting, enhancing its teaching in humanism and professionalism, introducing interprofessional education, implementing a mentoring program for students, and developing a new University-funded collaborative research program that is now resulting in receiving more competitive externally-funded grants.

10. Additional comments:

- a. Overall, the Committee was impressed by its visit to BGU; and it is grateful to the Faculty for its careful efforts in organizing the Committee's review and site visit.
- b. In a spirit of quality improvement, the Committee has made a large number of recommendations keyed to the subject areas above. It urges readers to examine the recommendations carefully and hopes that they will be helpful in particular to BGU.

## **Chapter 3B: Full Observations, Findings, and Recommendations:**

### **1. Organizational Structure**

Ben Gurion University of the Negev (BGU) houses both The Joyce and Irving Goldman Medical School at Ben Gurion University (the Goldman School) and the Medical School for International Health (MSIH) as part of the University's Faculty of Health Sciences (FOHS). Other schools within the Faculty for Health Sciences include the Leon and Mathilda Recanati School for Community Health Professions, the School of Medical Laboratory Sciences, and the School of Pharmacy.

The Goldman medical school is a 6 year program that grants a degree of Bachelor in Medical Sciences (B.Med.Sc.) after three years of study and a Doctor of Medicine (M.D.) after 6 years of study followed by a year of internship; whereas, MSIH, a collaboration with Columbia University, is a four year program based on the North American model that awards an M.D. degree after four years to students, primarily from outside Israel, who already have baccalaureate degrees.

Each of the two schools has its own director and administration, and each holds the position of a vice dean.

Faculty members all have appointments at BGU, and their promotions are based on the University's promotions processes. The highest organ of the Faculty is the Faculty Council comprised of the Dean, all the academic staff ranking Senior Lecturer and above, one representative of the University Senate, and elected representatives of the other four faculties. The Council elects the Dean for a three year term, and the Dean can be elected to only two terms. The Dean appoints the Vice Deans. This includes the Vice Dean and director of the Joyce and Irving Medical School, Vice Dean for Academic Affairs, Vice Dean for Education and Curriculum, and the Vice Dean for Student Affairs. The Council operates through its various committees.

Senior non-clinical faculty members have full university appointments and salary. Senior clinical faculty salaries are paid by the hospital or health services, while sabbatical and scientific liaison funds are paid by the university. Medical students can serve as teaching assistants and physicians assistants, and they are non-faculty members.

The clinical academic divisions of both schools include Internal Medicine, Surgery, Pediatrics, Gynecology and Obstetrics, Psychiatry and Anesthesia. The university academic divisions include Basic Medical Sciences (virology, microbiology, immunology), Community Health (family medicine, health promotion, occupational medicine, pediatric primary care), Division of Public Health (epidemiology, sociology of health, health systems management).

Each of the two medical schools has a year committee with 6-7 members chosen from faculty involved in teaching that year. They evaluate faculty teaching and student learning. They also support the students regarding both academic and personal issues.

### Observations and Findings

The organizational structure within and between both medical schools seems to support the overall mission (see Section 3, below). It is the Committee's impression that there is an excellent and collegial working relationship between students, faculty, and administrative leadership. For example, the students comment that they find faculty members quite approachable on a personal basis for career and personal support. In addition, they feel free to bring global academic issues such as quality of teaching to their year committee.

In Israel, the majority of funding for clinical care and medical education comes from multiple government ministries and reaches providers and educators through a variety of mechanisms. There are separate funding streams for education, clinical care, and research. Often there may be cross-subsidization from one type of activity, e.g., clinical care, to another, e.g., education. The Committee would like to stress particularly that the funding of clinical education is an “orphan” responsibility. Funds are not directly allocated to this activity, and teachers are required to volunteer long hours without compensation as a professional responsibility. Although this is a general issue for each medical school, the Committee’s understanding is that the Negev region poses particular problems and opportunities. There is a large disadvantaged population; and it is dispersed geographically in Israel’s largest region. The Committee believes it is important to consider ways to develop a coordinated mechanism for funding both the needed health care of the population and the education of the health professionals necessary to provide that care and hopes that the relative separateness of the region could lead to opportunities to pilot innovative approaches to funding both care and medical education.

The Committee was informed that a new Director had been appointed at Soroka Hospital and that this had created opportunities for integrated discussion at this level in the future. However, the Committee did not get a clear picture of the structures and processes that exist at a senior executive decision-making level at the critical interface between the University and its Faculty of Health Sciences and the health system, including Kupat Cholim Clalit and its hospital (Soroka) and the ambulatory care system (all of the Sick Funds); nor did the Committee get a clear picture of the interfaces between all of these parties and the various government ministries and structures such as VATAT that are involved in funding health care and medical education.

The Committee feels that resource allocation should be re-examined in light of several factors, some general and some specific to BGU. There is the fact that medical education includes both non-clinical education in a “traditional” academic setting and clinical education in clinical settings. In addition, there is an international trend towards

increasing training in ambulatory settings, and tying educational funding to hospital beds is not necessarily a good way to support such education. There is also a specific need to treat a large, diverse, disadvantaged population in the community.

Given the peripheral location of the Negev, there is an opportunity think creatively about and pilot test alternative, coordinated ways of funding health care and the education of physicians and other health professionals to serve the population of that region.

### **Recommendations**

- i. The University should take the lead in a reassessment of the funding of medical education and how it and the funding of the health system to serve the needs of the Negev population can be coordinated. This might include training non-physician clinicians such as nurse practitioners, physician assistants, and nurse anesthetists.

A one year time frame for reassessment and developing possibilities should suffice. Within two-three years, a group representing the University, health system, and government or other funders, might develop a specific plan and obtain appropriate financing for a regional pilot.

- ii. The committee recommends that BGU give special consideration to the unique nature and needs of medical schools to have both clinical and non-clinical faculty and researchers. This might include modifying promotion criteria to support clinician educators and clinician researchers.
- iii. There are significant benefits to continuity of leadership. Accordingly, consider having the dean serve a longer term. Also, consider the possibility of appointing vs. electing the dean [Intermediate term]

## **2. Mission and Goals**

### **Observation and findings**

The stated vision of the Goldman Medical School is to become a leading research, education and community-oriented institution.

The specific mission of the school is to embody the Beer Sheva spirit. This is exemplified by several principles:

- Treating the whole patient by attending to each patient's biopsychosocial needs.
- A commitment to provide a humanistic approach to care.

- An emphasis on integrating primary and tertiary care as well as preventative and curative care.
- A special emphasis on community oriented care, both locally and via the MSIH. This involves working with a diverse and largely disadvantaged population in the Negev as well as other disadvantaged populations globally.
- A commitment to training a diverse group of health care professionals from various under-represented populations including the Bedouins and those residents of the development towns. Plans are to also include training health care professionals from the ultra-orthodox communities.
- Research into basic and clinical science that can improve care.

The mission of the MSIH is specifically to focus on training global health care providers.

Summary of Committee Observations:

The Committee finds that the two schools embody their important missions. Both as individuals and as an institution, there is a demonstrated commitment to and actual living of the of the Faculty's articulated mission. We found this in our interactions with students, faculty, leaders and administrative staff. There is clearly a commitment to clinical care, education and research that are all based on the humanistic and community oriented mission at the core of the schools.

Multiple specific programs also exemplify the mission statements.

These include:

Beit Hamidrash-Noam: Learning the Human Spirit

Interprofessional education (IPE)

Buds of Medicine in the Negev

Facilitated admissions process for underrepresented populations

Collaborative research for faculty with internal and external funding

Center for Medical Education

Simulation Center

MD/PhD Program

The voluntary community-oriented service programs of the Medical Student Association (ASRAN) in which the majority of students participate.

The Committee commends each of these programs and will make additional comments and recommendations about some of them in other sections of this report.

The Committee is concerned about the possible expansion of the number of students in the Goldman School and how this would affect educational resources such as the faculty's ability to teach as well as venues for clinical teaching (see Observations, Findings, and Recommendations in Section 2, above). In addition, it is unclear to the Committee if there are sufficient resources currently to support expanding the facilitated admissions program to the ultra-orthodox population.

## **Recommendations**

- i. Continuing support of the each of the programs noted above that relate so well to the mission statements (long-term).
- ii. We recommend as part of the programs' self-evaluation there be ongoing assessment regarding the outcomes of the school, including the quality of education and the outcomes of the students (long-term).

## **3. Study Programs**

### **Observation and findings**

The Faculty of Health Sciences conducts its educational programs through five schools:

- a. The Joyce and Irving Goldman School of Medicine (the Goldman School), with its six-year curriculum followed by one year of internship, after which the MD degree is awarded;
- b. The Medical School for International Health (MSIH) with its four-year curriculum conducted in English and its recruiting foreign students who have previously completed a baccalaureate degree.
- c. The Leon and Matilda Recanati School for Community Health Professions, awarding degrees in nursing, physiotherapy, and emergency medicine.
- d. The School of Medical Laboratory Sciences, which awards a bachelor of laboratory science degree;
- e. The School of Pharmacy, awarding the bachelor of pharmacy degree.

The Center for Medical Education, founded several years ago but only recently rejuvenated, has enhanced the ability of the FOHS to provide educational support services for all five schools and created new opportunities for inter-professional education (IPE). The Center is presently focusing on faculty development, mainly assisting faculty in improvement of their frontal teaching. A substantial gift has been received to build a new clinical simulation center. This will greatly enhance the educational infrastructure. The existing simulation facilities are poorly designed and equipped without even basic audiovisual recording capacity. An explicit emphasis on development of IPE is now in its second year, and three schools (physiotherapy, nursing, and the Goldman School) have been involved to date. Participating students in different professional schools share their evaluations of the same patients through group discussion, and maintain contact with each other as they follow the patients through the academic year.

### **MD Degree Programs**

There is little formal interaction, i.e., interaction in courses and clerkships, between the students in the two MD degree programs owing to the differing curricular structures (4 year vs 6 year) and language of instruction. Although each program is led by a vice dean reporting independently to the dean, teaching responsibilities in the two programs are borne by the faculty at large. A particular faculty member is not identified with one program or the other.

### **The Goldman School**

The Goldman School's formal curriculum is comprised of three pre-clinical years, at which point students receive the Bachelor in Medical Sciences degree, followed by three clinical years. The MD degree is awarded following the nationally prescribed seventh internship year. The curriculum is conceptualized as a "spiral approach," which amounts to an attempt to promote both horizontal integration, with each course building on its prerequisites, and vertical integration, with each subject organized in conjunction with others taught at the same time. Basic science and clinical work are both incorporated together along the spiral path. This concept has been best implemented in the pre-clinical years; attempts to integrate basic science material into the clinical curriculum have been less successful.

The required clinical rotations begin in the middle of the 4<sup>th</sup> year with medicine and pediatrics; extend into the fifth year with psychiatry, surgery, obstetrics & gynecology, and medical subspecialties; and further extend into the sixth year with emergency medicine, family medicine, and a second internal medicine clerkship. Other 5<sup>th</sup> and 6<sup>th</sup> year selective and elective rotations complete the schedule.

A recent nationwide reduction in the duration of the 6<sup>th</sup> year curriculum has reduced the time available for elective clinical clerkships, including international rotations. Students and faculty are generally dissatisfied with this loss of opportunity for electives.

Completion of a research thesis is a graduation requirement. The proposal must be approved for advancement from the 5<sup>th</sup> to the 6<sup>th</sup> year and the final product must be submitted before the end of the 6<sup>th</sup> year. Students, although reporting varying experiences, perceived value to the thesis requirement. Some have had a very productive experience resulting in peer-reviewed publication. Others have found it difficult to find out the specific faculty and projects available to them. Other reported problems included limited faculty availability and responsiveness which prolongs the students' timeline for the project and lack of access to statistical support and other necessary infrastructure needs.

The 2007 CHE review found expansion of students' experiences in the ambulatory setting to be a high priority. Since then, the proportion of the clinical curriculum delivered in the ambulatory setting has risen from approximately 25 to 49 percent. This includes both increased use of hospital-based ambulatory clinics, including in the

subspecialties, and also an increase in community based primary care education. There are, however, still no substantive longitudinal clinical experiences. The school leadership feels that the available resources for ambulatory teaching are now fully utilized, and plans to create tracks within the curriculum. The community based primary care resources would be further enhanced for those in a new community medicine track. Others in a more intensive research track would have less emphasis on community medicine. A third track would emphasize international medicine. This format is planned to begin next academic year.

Additional opportunities for early clinical exposure have also been added since the last review. Patient contact in the 1<sup>st</sup> year is focused on communication skills, with students interviewing patients on four successive Tuesdays and spending a week late in the academic year learning about physical and sensory disabilities from patients. The 2<sup>nd</sup> year emphasis is on prevention, and in the 3<sup>rd</sup> year the Systems and Integration unit gets students “closer to disease” by providing the clinical context of active patient cases for study. Students value these early clinical experiences quite highly. Data reporting the teaching hours of basic science and clinical faculty in each preclinical year also reflect this shift toward clinical perspectives. Clinical faculty members now provide 37, 52, and 90 percent of teaching contact hours in the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> years, respectively.

### **The Medical School for International Health (MSIH)**

The MSIH was established in 1996 and primarily enrolls students from North America (and to a lesser extent the UK and other countries) who are interested in the global health orientation of its curriculum. The program is conducted in collaboration with Columbia University and is recognized by the New York State Board of Education. The report of their independent 2013 site visit was made available to the Quality Evaluation Committee. The MD degree is awarded from BGU. Students are required to complete the United States Medical Licensing Examination (USMLE) series and most apply for residency in the US through the Educational Commission for Foreign Medical Graduates (ECFMG).

The curriculum follows the traditional “2+2” North American model, but with the first two preclinical years also incorporating an emphasis on global medicine issues. The third year core clinical clerkships are conducted almost entirely at Soroka and Barzilai hospitals; they are generally of briefer duration than the Goldman School rotations and also incorporate one day per clerkship of global health perspectives. During the 4<sup>th</sup> year students complete four to five electives in North America, usually including some at Columbia University sites in New York City and two months at one of a number of global rotation sites maintained by BGU. There is no thesis requirement for graduation.

The clerkships are asynchronous with those of Goldman School, in part due to the differing language of instruction and structural differences in the clerkships but also because of rotation site capacity issues. The clinical services at Soroka and Barzilai

hospitals are therefore either hosting Goldman School or MSIH students at a given time, but not both.

Language difficulties present a serious problem for the students doing clinical clerkships in Beer Sheva. The students are largely native English speakers with no knowledge of Hebrew when they arrive. They get language instruction, but not enough for sophisticated interactions with patients and staff. There is a particular problem with Hebrew medical records which the students find difficult to read, particularly if handwritten. There is no formal infrastructure for translation. The fact that Israel has a long experience with absorption of immigrant physicians, who usually seem to acquire sufficient language skills in less time than the MSIH students spend in Israel, suggests that it should be possible to improve the MSIH students' Hebrew language education particularly in written Hebrew and medical terms.

### **General Curricular Issues**

Both MD programs rely almost exclusively on frontal lectures for classroom instruction and not on more effective, active learning methods. What opportunities there are for active learning by students depend on the skill of the teacher in facilitating the involvement of individual students within a larger classroom group. The one notable exception is the biochemistry and immunology course, which intercalates brief problem-based learning blocks within the course and also utilizes a variety of interactive computer-based tools. There are appropriate opportunities for reflective writing and discussion in the courses addressing medical ethics and professional development.

The Committee's impression was that students found most course syllabi to be superficial, with insufficient detail to guide them in their reading prior to class or help them prioritize the material afterward. The lack of specific, published learning objectives also makes it difficult to link the curriculum to well-defined formative and summative assessment strategies, as will be necessary if the school is to work toward adopting the competency-based outcomes assessment rubric now implemented in the United States and United Kingdom. As international bodies concerned with medical education (e.g., the World Federation for Medical Education) move toward international accreditation standards, there may be eventual implications for the ability of the Faculty's medical school programs, particularly the MSIH, to maintain international recognition.

### **Special Programs**

The MD/PhD program attracts outstanding students but is very small, matriculating only one to two students per year. The challenges all such programs face in minimizing the very long duration of education and training are exacerbated by a reported inability to allow some individual courses to apply to the requirements for both degrees. A student must have 27 credits toward the PhD and none, even when pertinent to the MD, can be credited toward that degree as well. The need to post 27 PhD course credits also limits students' time in the laboratory during the years away from the MD program, such that

students report having to spend considerable time in the laboratory even after they return to the clinical years.

The Buds of Medicine Program provides a pathway to medical education for the area's Bedouin population and for residents of the rural Jewish development towns in the Negev. Both populations are under-represented in and underserved by the health professions. The program provides remedial and supplemental science education and exposure to the profession, and has been facilitating the entry of 0-2 such students into the Goldman School annually in addition to facilitating entry of other students into other health professional and scientific education programs. BGU is planning a program similar to Buds of Medicine that will target ultra-orthodox Jewish students. The Committee questions whether the faculty resources necessary to implement this program effectively are available.

### **Recommendations:**

- i. The school must adopt a competency/outcomes-based approach to its curriculum and to student assessment in order to keep pace with best practices in medical education. This will first require the development and maintenance of specific, outcomes based learning objectives for each course (short term), followed by the development of a competency-based framework for assessment of students' attainment of each of these objectives (intermediate term).
- ii. The present curriculum is predominantly lecture-based. Wherever possible such frontal teaching should incorporate more interactive methods and make maximal use of available educational technologies. Opportunities for learning in small, interactive groups (such as problem-based learning) are few and should be expanded. The Committee recommends developing a plan to increase active learning in courses that currently are lecture-based (short term) and implementing that plan (intermediate term).
- iii. Aside from the IPE sessions available to selected students, there are no opportunities for longitudinal clinical experience, which the Committee feels is essential to students' understanding of and skills development in chronic disease management. Future development of the community-based primary care teaching program should address this curricular need. (intermediate term)
- iv. Benefits to students of the research thesis program appear uneven, and the administrative structure for its support limits its effectiveness. The Committee recommends a review of the scope and infrastructure of this program, perhaps in the context of the new multiple track system under development (intermediate term).

- v. Efforts to expand students' options for pursuing the MD/PhD, as described in Chapter 6 of the self-evaluation report, should be extended to review the structure of the existing program. At present at BGU it is not a true combined degree program but an opportunity to enroll in and fulfill the course credit requirements of two separate degrees. Although the Committee was told at BGU that the requirements are mandated across the country, it learned that other universities do allow certain course credits to be applied to both an MD and a PhD degree program. Accordingly, the Committee recommends that BGU change its local policy. This should make the MD/PhD program less onerous and more attractive to potential candidates. (short term)
- vi. Consider how the courses and experiences offered in the two schools (Goldman and MSH) might complement each other (intermediate term). For example, consider how pilots in one school might be extended to the other.
- vii. For MSH students, develop sufficient support and programs so that they acquire the Hebrew language skills necessary for professional communication with patients and staff.
- viii. The resources (faculty, hospital sites, ambulatory sites) required by the Medical School for International Health compete with the needs of Goldman School students, particularly in light of recent and likely future class size expansion in the latter program. The committee recommends a comprehensive evaluation of this impact, and reassessment of the value of MSH to the school and its local and national communities. (Short term)

#### **4. Human Resources / Faculty**

##### Observation and findings

The Faculty of Health Sciences' self-evaluation report addressed the roles of those who take part in education, training and research in several different ways and places. The discussion of these roles was diffuse possibly because so many who deliver the Faculty's education, training, and research agenda are not direct employees of BGU but of the affiliated health system – primarily Clalit and Soroka Hospital. This situation differs from that of other Faculties within the University.

The Committee directly observed that persons working at the frontlines of education, training, and research show a degree of commitment that goes way beyond the call of duty to their official roles: The examples of the pediatric ambulatory care and imaging units were compelling. Both student and alumni feedback provided strong evidence that educational commitment was perhaps the most attractive feature of the BGU

medical schools. The reputation for such commitment helps to attract students; and when students come to BGU it helps to engender in them an impressive sense of professionalism. The Committee saw, heard, and felt this as an underlying theme throughout the visit and regards it as a major strength.

The Committee also considered whether sufficient persons are involved in education, training, and research in the Faculty to ensure that the stated missions and goals can best be achieved. A recurring theme from both the Faculty leadership and the persons at the frontline was that there was no protected time for clinically qualified, clinically active people to participate in education, training, and research activities. One possible contributor to the problem was that the Clalit–Soroka management might not have, or be able to attract, sufficient clinical professionals to cater to the immediate healthcare needs of the local population, thus making the concept of protected time an unaffordable luxury until service provision can be guaranteed.

The shortage in adequate availability of clinically qualified professionals appears to extend beyond Soroka: there are also too few family physicians based in the clinics outside the main centers. The Committee was disturbed to hear about the anomaly that the enhanced financial incentives that have been introduced to encourage doctors to work in other specialties in the BGU catchment area had not been extended to include family physicians. The consequences are short term, vacant positions, and long term since fewer students will have sufficient exposure to this field of medicine as a potential career choice. Despite a several week-long required clerkship in family medicine, there is, as previously noted, a lack of the longitudinal experiences that are the mainstay of primary care services and are related to important clinical considerations such as the role of time in diagnosis and treatment.

It appeared that the importance of faculty development activities is beginning to be recognized. The rejuvenation of the Center for Medical Education is a positive development. The provision of special workshops for the promotion of teaching and evaluation methods was mentioned, but little detail was provided. The Committee was concerned that given the limitations on time available noted above dedicated opportunities for formal faculty development programs were likely to remain circumscribed.

The Committee learned that the promotion process within the Medical School had become more transparent than previously. Better internal support from the committees involved in the process including better follow-up of those persons who were eligible for promotion but might not have engaged with the system. A two-tier committee structure was described, where the gateway to the second tier was to show involvement in professional service provision and education, training, and research activities. How these components were documented was not made explicit. The second tier related to the research itself, including both grant funding and publications. This tier

of evaluation also notes the important overlap between research supervision as an education and training role as well as an important element of the research itself.

The Committee was told that the timescale for processing applications for promotion had been shortened using a journal-like peer review system with close follow-up. It appeared that improvement of the promotions process was a work-in-progress and merited further attention.

The Faculty acknowledged that with the explosion in generation of new knowledge and increased access to information through use of information technology by professionals and patients, physicians' practicing evidence-based medicine and having excellent lifelong learning skills are very important. Although faculty role models were cited as a significant way in which students acquire these skills, the Committee felt that there is a need for more formal documentation of how these values and skills are inculcated.

### **Recommendations**

- i. Formulate guidelines for continuing professional development/faculty development in education and training (short term)
  - a. Use the faculty development guidelines for documentation of activities by faculty (intermediate term)
  - b. Incorporate participation in faculty development into promotion criteria (long term).
- ii. Initiate high level discussions between BGU and the health system, especially Clalit and Soroka Hospital, to develop approaches that will facilitate the education, training, and research components of the work of all physicians and for developing a strong cadre of clinician scientists. (**See Recommendation i, Chapter 3, section 2 - above**)
- iii. In collaboration with the Sick Funds discuss with the Ministry of Health extending the premium pay award to family physicians in the periphery (short term).

## **5. Students**

### **Observation and findings**

#### **Admissions**

##### ***a. The Goldman School***

The standard admission route to the School is based on the "sechem" followed by a two-stage interview process. The "sachem" itself is derived from a combination of the matriculation scores and a psychometric test. The desire to increase the number of students invited for interview has enabled students with lower "sechem" scores to be

interviewed. In 2012, 835 students were interviewed in the first round and 422 in the second round. The interviews each involved two faculty members and lasted about an hour. The Committee regarded this two stage interview process as labor intensive. We heard that the other medical schools used a simulation center as part of the student selection process and wondered whether there was any evidence that the Goldman approach was superior to that of the other schools. It was stated that almost all applicants applied to all four Israeli schools. The final intake was 90 (7 percent) of applicants.

There is also an alternative route for students with high scores in previous academic studies who had completed either a Bachelor's degree or two years of study. They were selected for interview if their psychometric test result was at least 660, the range in the standard route being 689-800.

The Committee was informed about two additional admissions routes for students from disadvantaged backgrounds. 1) One or two students each year are admitted from development towns. They are allowed to have a "sechem" 5 percent lower than that used by the standard process. 2) One or two students are admitted via the "Buds of Medicine in the Negev" program. Although no data were presented, the Committee was gratified to be told that these students from disadvantaged backgrounds performed well during their clinical studies.

The Committee also noted that the School hoped to introduce a computerized pre-selection questionnaire.

#### ***b. MSIH***

Students for this program have to complete a North American four year college degree course including pre-med science. Those meeting academic criteria described as high grades and a MCAT of 30 or above are interviewed by two faculty members at Columbia University in the USA. Though in past years, students could be admitted with low MCAT scores, internal concerns had led to a higher threshold for admission MCAT scores; and this reportedly has resulted in better results in the subsequent ULSME examinations.

#### **Retention Rate**

The reported dropout rate in the Goldman School was 7 in 2010-11 and 3 in 2011-2012, the majority leaving because of academic reasons with a few leaving either for personal reasons or to transfer to another school. In the MSIH there were only three dropouts in the classes between 2008 and 2012. The Committee regarded this as an appropriately low occurrence of dropouts.

#### **Interaction with the Community**

The Committee heard that students in both schools had active involvement with the local community. In the Goldman School the medical student association (ASRAN) organizes a number of projects including workshops in the prevention of sexual abuse

delivered in schools, first-aid classes for the local citizens and HIV/AIDS prevention. About 50 percent of the pre-clinical students are reportedly involved in some form of volunteer activity in the community. In the MSIH students work with local Non-Governmental Organizations from their first year and remain connected with the organization throughout their stay.

### **Student Satisfaction**

The Committee met with preclinical, clinical and MD/PhD students in three separate sessions and also met students during their tour of both hospital and clinical facilities. In general, the students rated their learning experiences throughout the course highly, more so in the clinical years. They liked early clinical experience, the friendly nature of the School and the easy access to their teachers. The quality of the lectures could be improved by using more engaging instructional methods such as “flipped classrooms” and more advanced technological approaches rather than a series of standard power-point slides. The students told us that they would like to help with this process and we understand that they can be paid for such help. There was also variability in the quality of involvement by teaching assistants. They would also like more information about the content of the lectures in advance rather than just having the title. Furthermore, they thought that the timing of lectures was changed too often at short-notice. The clinical students commented that some of their examination questions were ambiguous; some of the power-point slides in lectures needed refreshing; there was some variability in teaching on the wards; and that the arrangements for the MD thesis could be improved with better arrangements to pair students with potential supervisors.

The Committee was told there are opportunities to work in the hospital and in laboratories.

The students commented that interactions between the Goldman School and the MSIH mainly took place at the social level outside the academic environment.

The MD/PhD students stated that the two year break for the PhD component of their course presented challenges to complete their thesis in time. Although they were exempt from the regular MD thesis, they might have to continue their lab work after the end of their clinical training day or take a further break after the end of the 6<sup>th</sup> year and the start of their internship. They thought that the PhD break could be increased.

The students all appreciated the long-term mentoring system in which they could discuss any personal or academic issues with a member of the faculty.

Some students are able to obtain supervised summer research projects that are supported with stipends. The Committee had the impression that policies relating to how students can get summer research placements and policies relating both to the financing of such projects and also their relationship to the compulsory research thesis

and to recruitment into the MD/PhD program were not clear to either faculty or students.

### **Alumni activity**

The alumni that we met all either worked at Soroka Hospital or were working in the local community. They were all involved with BGU in one way or another. They believed that the community focus of the BGU syllabus was of continuing value in their professional practice. They appreciated the developments that had taken place in the School such as the Clinical Research Center which assisted them in their research plans.

We were told that the Medical School has had difficulties in connecting with its former students. Presumably that is particularly true for those who do not remain affiliated with BGU or the health system in the Negev.

### **Recommendations**

- i. Despite the fact that the present admission process is time-honored, it is highly resource intensive. It should be subjected to formal review of its effectiveness; and its outcomes should be compared to the other schools. (intermediate term)
- ii. Provide more information to students before each teaching event including greater detail about the content of the session, expected learning outcomes, and supplementary teaching materials. (short term)
- iii. Improve the preclinical frontal lectures. Actively involve students in the preparation of teaching materials. (short term)
- iv. Relieve students on the MD/PhD course of the need to take unnecessary or duplicate courses. (see Recommendations in Section 4).
- v. Formulate guidelines for faculty involved in education, training, and research about how students can get summer research placements (short term) and formulate guidelines for students to facilitate their getting summer research placements (short term)
- vi. The Goldman School should strengthen its relationship with its alumni by “community-building” efforts, for example, newsletters, alumni events and ongoing involvement in the development of the School. (intermediate term)

## **6. Teaching and Learning Outcomes**

### Observation and findings

The Committee learned mostly about the teaching and learning outcomes in the 6-year program of the Goldman School vs. the 4-year program of MSIH. Accordingly, it cannot easily compare teaching and learning outcomes between the two schools.

### **Basic sciences**

The Committee's impression was that basic scientists, despite having significant teaching responsibilities in the medical school programs and in the other schools with the Faculty of Health Sciences, are not specifically rewarded, or prepared, for teaching.

Student assessment, at least within the Goldman School, indicates that much of the teaching, most of which is done by lecture, can be improved. Students have concerns about the content of syllabi, materials used for lectures and demonstrations, and the clarity of the frontal teaching/lecturing. (also see Sections 4 and 6, above) The Committee was told that such issues have emerged through the routine debriefing of courses that occur and believes that is a commendable process for identifying first steps in improving teaching. The leadership, e.g., the Dean and Vice-Deans, also appears to be aware of these issues and be receptive to addressing them. The leadership has rejuvenated the Center for Medical Education; and its faculty development programs could be helpful in improving the performance of teachers. Finally, we were told that the Medical Computing Unit is also willing to help faculty in improving their courses.

One measure of basic science teaching performance could be that all students would acquire a high level of knowledge in all relevant basic science fields. Another would be that they have acquired the skill of obtaining necessary new knowledge – a step in achieving skill at self-directed, lifelong learning – and have the judgment to acquire new knowledge when it is appropriate.

### **Clinical teaching**

Clinicians are now extensively involved in pre-clinical teaching, i.e., 36 percent of the pre-clinical teaching hours in the first year to 90 percent of the hours in the third year. It is likely, therefore, that clinically relevant teaching is occurring extensively in the pre-clinical curriculum.

Although the curriculum is said to have a spiral structure, the Committee could not ascertain the degree to which there is planned progression without unnecessary redundancy from basic, to intermediate, to advanced knowledge of a subject or the degree to which there is cross-linkage between the clinical and basic sciences. We

understand that the injection of clinical teaching into the pre-clinical curriculum is much more successful than the injection of basic sciences into the clinical curriculum. In the experience of committee members, this issue occurs in medical schools everywhere; but it can be addressed. One approach is faculty development of basic scientists so that they can participate more effectively in clinical teaching settings.

Elsewhere in the world, outcomes-based approaches such as ensuring that students achieve predetermined clinical competencies vs. spend a certain amount of time in a particular discipline are changing medical education.<sup>5</sup> Simulation is a particularly useful tool for practicing skills and interactions and developing high levels of many competencies. The development of a new, markedly more sophisticated, simulation center should help the Faculty of Health Sciences move further in this direction. Simulation should not, however, be considered the only method for students to acquire or be assessed on acquisition of competences.

The current evaluation process is primarily based on multiple choice examinations, including the national examinations, plus clerkship evaluation forms. One might consider determining if the results of the current evaluation process are comparable to steps 1 and 2 of the USMLE which many learners will take at some point in order to receive some clinical training in the United States. USMLE step 1 assesses preclinical education. USMLE step 2 assesses clinical education within medical school and includes the use of standardized patients. If one knew that BGU students who did well on the evaluations within BGU and the national examinations did well on the USMLE and vice-versa it would help validate the local/Israeli assessment process. In general, however, multiple choice examinations, while a reliable form of assessment, i.e., results tend to be reproducible, are not necessarily a valid form of assessment, i.e., the results do not necessarily represent acquisition of competency.

The Committee recognizes that when a non-Israeli student comes to MSIH, just being in Israel represents an international experience; and, thus, clinical work in Israel by MSIH students can be considered in a global medicine context. Nonetheless, the Committee was concerned that MSIH students, despite receiving significant education in Hebrew, cannot read medical records well, especially handwritten ambulatory records. Though the Committee learned that soon there will be new electronic records that should markedly reduce or eliminate handwritten ones, the concern is that when learners either are not fully aware of recorded information or are dependent on others' interpretations of the recorded information, they may not be acquiring sufficiently the knowledge and the habits of learning they will need to work effectively as physicians in their own countries.

---

<sup>5</sup> See Englander R, et al. Toward a common taxonomy of competency domains for the health professions and competencies for physicians. *Academic Medicine*. 2013;88:1099-1094.

## **Lifelong and Self-directed learning**

Self-learning and life-long learning skills have become increasingly important, indeed essential, with the explosion of new knowledge in the medical sciences and medicine. The Committee noted positively that the introduction of BGU students to the library and acquisition of knowledge from traditional library sources, books and journals, occur very early. The Committee feels this is an important first step. It understands that students are exposed to faculty role-models who demonstrate in their actions that they are acquiring new knowledge and also that increasingly within Israel there is an emphasis on evidence-based medicine. The Committee believes, however, that there should be a proactive effort to ensure that students do develop life-long learning skills.

## **Recommendations**

- a. Short term/immediate (~ within 1 year)
  - i. Construct, as soon as possible, the planned simulation center, to make it more possible to facilitate competence-based learning.
  - ii. Ensure that the curriculum has specific and meaningful learning objectives for each course.
    - o Document student attainment of the learning objectives.
    - o Create new methods to assess teaching effectiveness in addition to student opinion. Possibilities could include peer review (most likely to be an assessment of process); attainment of competence by learners (assessment of outcomes).
    - o Determine the science base essential for future physicians by careful and thorough development of learning objectives for basic science courses.
- b. Intermediate term (~ within 2-3 year)
  - iii. Provide faculty development for all forms of teaching.
  - iv. Enhance the current promotion process, which nominally considers teaching, so that there is greater consideration of teaching performance for all categories of promotion.
- c. Long term (until the next cycle of evaluation)
  - v. Consider validating assessments of student performance against their results on the USMLE (see rationale above).

- vi. Develop a process for assessing that students have met predetermined knowledge milestones and predetermined learning objectives, and that they achieve essential competencies.

## **7. Research**

Although basic and translational research is highly valued at BGU, the career path of the physician researcher is not well laid out. The MD/PhD students have two years, a short period of time, to do a PhD thesis. They must continue their thesis work through the remainder of their clinical years (about two and a half). Later in their careers, physician researcher can find it very difficult to impossible to get protected time to conduct research, even well-respected and funded research. One MD/PhD faculty member who presented his experience to us had transitioned out of clinical practice entirely.

The publication record of the BGU medical school faculty is very good. Reviewing the past 5 years, there are multiple publications in first tier journals.<sup>6</sup> The range of topics with outstanding researchers is very good and very pertinent to current and anticipated advances in medicine, including bioinformatics, genetics, neuroscience, and immunology. Clinical research is strong and well integrated with translational research in several areas, including nutrition and diabetes, as well as in genetics. Multiple disease mutations have been reported in the past few years by this faculty. However, we could not evaluate separately the number of publications by physicians with clinical care responsibilities. From the information presented to us by MD/PhDs on the faculty, the burden of clinical care makes it most difficult to conduct research. There is no “protected time” for research, even for physicians with substantial grant support.

From the information provided, there appears to be good support of research from external competitive grants as well as from internal grants provided by BGU. A well-developed database of research support may be helpful.

There are internationally outstanding researchers at BGU; and there is also a strong institutional emphasis on encouraging research, with the dean, Gabriel Schreiber, who has both an MD and PhD, continuing to publish very fine science concomitant with his administrative duties.

The educational philosophy of BGU medicine is described as a spiral, in which science and practice go hand-in-hand throughout the developmental process of the student into a physician. Nonetheless, for the medical students, the science experience, and incorporation of that experience into the practice of medicine, appears not to be

---

<sup>6</sup> These include: Nature Genetics, J Neuroscience, PNAS, Nature Neuroscience, J Biological Chemistry, Nature Immunology, and nearly first-tier journals, including Am J Human Genetics, Molecular Psychiatry, New England Journal of Medicine, and Genome Research.

entirely satisfactory. We heard that there may be problems in approach to the students by the basic science teaching faculty, which was attributed to problems in that faculty. But it also could be that there are problems with student culture, which appears to value “practicality” over the scientific basis for medical practice. Examples: 1) The Committee was told that there used to be a basic science day every few weeks on several clinical rotations. This was discontinued because the students felt it was not helpful. 2) One of the greatest scientific strengths of BGU with clear clinical applications is molecular genetics, but one investigator in the field reportedly felt he could not find doctors to talk with about the subject.

The role of the physician scientist is not well defined in the medical school or in the hospital. S/he falls between the two provinces. At every career level, starting with the MD/PhD students, there are onerous and sometimes conflicting expectations. Course requirements for the students are duplicative (see also sections 4 and 5, above). The amount of time allotted to the PhD experience is too short and creates great burdens during the clinical years that follow the two PhD years. For the physician scientist on the faculty, there are similar problems. There is no systematic institutional approach to balancing the clinical and scientific working time for each individual. The Committee felt that the scientific productivity of these persons has suffered and is concerned that in the long-haul this can affect clinical work as well.

We were made aware of conflict in Beer Sheva between the medical school and hospital over this issue of support for physician-scientists; and this is also a national issue for the educational, health-care, and budgetary allocations systems in Israel.

### **Recommendations:**

- i. Consider local and national policies for developing physician scientists. (short term).
  - a. Advocate for a national policy on physician scientists. Just as residency programs are supported for MDs, a complete PhD and postdoctoral research experience should be supported.
  - b. The PhD component of the MD/PhD requires more than two years of work and thus requires more than two years of PhD support.
  - c. Make the MD/PhD program a truly combined degree program (See Recommendations in Section 5).

## **8. Infrastructure**

### Observation and findings

The Committee was unable to study exhaustively or view and experience all aspects of infrastructure. It did hear about aspects relating to the library; technology support for teaching; the animal facility, which it also visited; some of the plans for simulation and a new center; and issues of infrastructure support between Soroka Hospital and the medical schools. It also visited two Clalit clinics, one in an area of Beer Sheva that serves a low income population and the other in the Arab community of Tel Sheva. Both clinics are the result of joint activity by Clalit and the University, which is stated in a sign on each building; and both have very dedicated staff that are committed to, and have facilities for, teaching.

#### Library:

The library facility of the medical school is on the Soroka Hospital campus; and the Committee was told by students that they would like it to be open longer and have more study space. The combination of the two improvements would allow them to do more of their studying on the medical campus. The Committee was also told that the University's library facility, although it is across the street from the hospital campus, has longer hours and additional space.

The Committee feels that the most important issue is whether students can access library materials knowledgeably, rapidly, and conveniently. Our understanding is that there is such access owing to the purchases and subscriptions of the Library and their availability online. But, there are apparently some limitations due to budget and price issues, e.g., Clinical Key.

The Committee believes that the principal issue requiring review is whether students know good ways to acquire needed information and are motivated to do so – i.e, whether they are effective self-directed learners. (see above under “Teaching and Learning Objectives – Lifelong and Self-Directed Learning”).

Whether students have appropriate study space on campus is another issue.

The Committee is unable to speak directly to the issues of hours-of-operations and space. These issues would need to be considered jointly by the University and Soroka Hospital.

#### Animal Facility:

Although the Committee understands that not all of the animal facilities are under one roof, and it visited only the facility closest to the medical school building, we were impressed that the management of the animal facilities has developed an advanced, user-friendly, secure facility for animal experimentation and maintenance. The recent accreditation of the animal facility is laudable.

#### Simulation:

The existing simulation center has been recognized to be inadequate for the needs of the Faculty and does not have high-fidelity simulation capability. Accordingly, plans have been developed for constructing a new Simulation Center. For reasons not detailed to the Committee, construction has not yet started; and for reasons stated above (see Section 7 above, Teaching and Learning Objectives – Competence-based learning), the Committee feels it is important to enhance the simulation capabilities of the Faculty. The key issue is having a curriculum plan that enables efficient use of simulation to forward the teaching and learning objectives of the Faculty. The Committee supports rapid expansion of the Simulation Center. It recognizes that having an appropriately spacious and equipped facility is a necessary but not sufficient step in achieving the educational objectives.

There are important considerations related to the nature of simulation facilities that are optimal for undergraduate medical education, interprofessional education, other health professions education, and graduate and post-graduate education. Ideally these considerations would lead to joint discussions and planning between the schools in the Faculty of Health Sciences and between the Faculty, Soroka Hospital, and the Sick Funds.

#### Clinical facilities for teaching:

The Committee's impression is that hospital capacity for teaching is already stretched to the limit by the already expanded size of the Goldman School plus the MSIH students. Thus, it questions whether there is enough hospital capacity to handle a further projected increase in the Goldman School class size. It anticipates several infrastructure support issues if there are further increases in class size.

In addition to hospital beds and hospital-based teachers, these include the following:

- Is there sufficient space for lectures, laboratory sessions, small group team-based learning?
- Is there sufficient faculty to support the active learning approaches that seem to work best for adult learners?
- Will ambulatory teaching sites and faculty be sufficient?
- Is the faculty development infrastructure robust enough to handle an increased number of teachers especially if they are using newer teaching methods?

#### **Recommendations**

- a. Short term/immediate (~ within 1 year)
  - i. Construct, as soon as possible, the planned simulation center, to make it more possible to facilitate competence-based learning.

- ii. Evaluate the need for student study space and lengthening the hours that students can access the current space especially during examination periods.
- iii. Ensure that there is a good strategic plan for the use of various types of simulation, e.g., standardized patients; and low, medium, and high fidelity simulators, to facilitate various types of learning, e.g., communications skills; technical skills interprofessional team interactions, in various types of settings, e.g., inpatient, ambulatory, etc.
- iv. Perform a formal assessment of available and potentially available infrastructure, both physical and human resources, under scenarios of various increases in total number of students and various proportions of Goldman School vs. MSIH students.
  - b. Intermediate term (~ within 2-3 year)
    - i. Develop a Library strategic plan for ensuring that students and Faculty are supported for optimally efficient and effective self-directed and lifelong learning.
    - ii. Develop and implement a plan for the expansion of faculty development for teaching and for assessing the effectiveness of faculty development activities. (See Section 5, Recommendation I, above)

## **9. Self-Evaluation Process**

- Observation and findings

The Faculty undertook a serious process to put together the self-evaluation report that the Committee reviewed; and it is described in Chapter 5 of that report. Similarly, the Committee felt that site visit was well organized and was impressed by the production of additional materials during the visit as requested by the Committee to address questions and issues that arose at the time.

The Committee greatly appreciates the effort that was put in by the leadership of the Faculty, and thanks the Dean, Prof. Schreiber; his appointed coordinator for the report, Prof. Emmanuel Sikuler; and the many members of the Faculty who contributed information and materials to the report. In addition, we appreciate the contributions of all those who met with the Committee.

Chapter 6 of the self-evaluation report also responds nicely to the issues that were raised in the report of the committee that the Council for Higher Education appointed to review medical schools in 2007.

The present committee would like to make a couple of comments on the process of the self-evaluation reports, in general, and on ongoing self-evaluation:

- The Committee understands that the purpose of the Council's Quality Assurance program and processes is to stimulate continuous improvement of the educational programs and institutions it accredits. Continuous improvement generally derives from recognition of problems and potential problems and a commitment to address them.
- It is important to state desired outcomes or objectives in advance. Then one can assess how one is doing in achieving those outcomes/objectives regularly and systematically. Failures in achieving desired outcomes/objectives allow one to know the problems that can be addressed.
- This assessment of results in relation to goals should be done on a regular basis; and ideally it should be accompanied by a survey of what is happening in other similar places that is relevant.
- The overall set of issues/problems that would benefit from addressing and lead to improvement then lead to a specification of work to be done and timelines.
- The entire process is strategic planning and evaluation. Major businesses do it on a regular basis, often annually, but at least biennially; and universities and their principal Faculties, such as the Faculty of Health Sciences at BGU, could certainly and profitably do this as well.
- Although the Committee was not made aware of a specific ongoing strategic planning and evaluation process at BGU, indeed it noted that the curriculum lacked detailed teaching and learning objectives that would be necessary for such an evaluation, it did read and hear about a number of important new programs that the Faculty has started in the past few years. It applauds the Faculty for developing efforts to expand its teaching in the ambulatory setting, enhance its teaching in humanism and professionalism, introduce interprofessional education, and develop a new collaborative research program.

- **Recommendations**

- i. The Committee recommends that the Faculty of Health Sciences at Ben-Gurion University (and indeed the corresponding faculties at the other schools in Israel it has reviewed) develop formal strategic planning and review processes (short term)

- ii. Perform an internal review of the strategic plan not less frequently than every other year. (intermediate term)
- iii. The Committee recommends that this and all the corresponding faculties at the other schools in Israel of a similar type include in the future self-evaluation reports required by the Council for the periodic reviews by the Council a specific listing of all new programs generated in each two year period since the prior review and a specific listing of all challenges or problems that have been revealed in internal reviews with specific plans for addressing each in a time certain. (long term)

## **10. Additional Comments**

The Committee was impressed by its visit to BGU. As noted above there was ample evidence that the respective missions of the Goldman School and the Medical School for International Health have been incorporated widely into curriculum and practices. In the case of the Goldman School, the Committee found a palpable commitment to the Beer Sheva Spirit including treating the whole patient by attending to each patient's biopsychosocial needs, providing a humanistic approach to care, emphasizing the integration of primary and tertiary care as well as preventative and curative care, and emphasizing community-oriented care. In the case of MSIH, there appears to be a strong commitment to admitting and developing a cadre of physicians who understand and value global health.

The Committee was pleased to learn about several recently developed programs that support the mission of the school. These include, but are not limited to, a curriculum that emphasizes the humanities, humanism, and ethics; an interprofessional education program; a mentoring program for students; and a successful collaborative research program for faculty.

In light of the fact that at its inception in the 1970s, the Goldman School, then simply the Medical School of Ben-Gurion University of the Negev, gained a wide reputation for its innovations in medical education, the Committee was surprised to learn that much of the educational methodology currently in use is "traditional" and lecture-based and that assessment is primarily multiple-choice tests. It urges careful examination of modern educational methods with a focus on participatory and experiential learning techniques.

Finally, it is grateful to the Faculty for its careful efforts in organizing the Committee's review and site visit.

## **Chapter 4: Collected Recommendations**

Below, the Committee aggregates all of its recommendations from Sections 2-10 of Chapter 3. The wording has been changed in some instances in an effort to put the recommendations in a similar and direct format. Short-term refers to “within 1 year”; intermediate-term refers to within approximately 2-3 years; and long-term refers either to “ongoing” or “until the next cycle of evaluation”. The intent of these recommendations is quality improvement. Many can be implemented locally within departments, the Faculty, or the University. Some encourage either the University to advocate beyond its walls; and some encourage the University to collaborate with others beyond its walls. Though the list is long, the Committee believes that each merits attention and should contribute to a plan of action.

### **Section 1 - Organizational Structure:**

- i. The University should take the lead in a reassessment of the funding of medical education and how it and the funding of the health system to serve the needs of the Negev population can be coordinated. This might include training non-physician clinicians such as nurse practitioners, physician assistants, and nurse anesthetists.  
A one year time frame for reassessment and developing possibilities should suffice. Within two-three years, a group representing the University, health system, and government or other funders, might develop a specific plan and obtain appropriate financing for a regional pilot.
- ii. The committee recommends that BGU give special consideration to the unique nature and needs of medical schools to have both clinical and non-clinical faculty and researchers. This might include modifying promotion criteria to support clinician educators and clinician researchers.
- iii. There are significant benefits to continuity of leadership. Accordingly, consider having the dean serve a longer term. Also, consider the possibility of appointing vs. electing the dean [Intermediate term]

### **Section 2 - Mission and Goals:**

- i. Continue supporting each of the following mission-relevant programs (long-term).  
Beit Hamidrash-Noam: Learning the Human Spirit – a humanism curriculum  
Interprofessional education (IPE) – a teamwork curriculum  
Buds of Medicine in the Negev – a program to enrich the preparation of potential Bedouin students

Facilitated admissions process for underrepresented populations  
Collaborative research program for faculty  
Center for Medical Education – faculty development; continuing professional development  
Simulation Center – new physical facility; incorporation of simulation into the curriculum as appropriate to facilitate development of competencies  
MD/PhD Program (See Recommendations in Section 8)  
The voluntary community-oriented service programs of the Medical Student Association (ASRAN) in which the majority of students participate.

- ii. Ongoing assessment of the outcomes of the school, including the quality of education and the outcomes of the students. Include results in future self-evaluation reports. (long term)

### **Section 3 – Study Programs:**

- i. Adopt a competency/outcomes-based approach to curriculum and to student assessment in order to keep pace with best practices in medical education.
  - a. First develop and maintain specific, outcomes based learning objectives for each course (short term)
  - b. Then develop a competency-based framework for assessment of students' attainment of each of the detailed learning objectives (intermediate term).
- ii. Inject more interactive teaching methods into the curriculum.
  - a. Reduce frontal lectures to a minimum. They are currently the predominant teaching method.
  - b. Make maximal use of adult learning methods
    - i. Greatly expand opportunities for learning in small, interactive groups (such as in problem-based learning).
  - c. Make better use for available educational technologies.
  - d. Develop a plan to increase active learning in courses that currently are lecture-based (short term)
  - e. Implement the plan (intermediate term).
- iii. Develop opportunities for longitudinal clinical experiences. The Committee feels is essential to students' understanding of and skills development in chronic disease management. Future development of the community-based primary care teaching program should address this curricular need. (intermediate term)
- iv. Review the scope and administrative infrastructure of the research thesis program, perhaps in the context of the proposed multiple track system (short

- term). Implement appropriate changes to enhance the value of the program (intermediate term).
- v. Review the structure of the existing MD/PhD program (short term)
 

Make it a true combined degree program rather than what it appears to be at present, namely, an opportunity to enroll in and fulfill the course credit requirements of two separate degrees. Although the Committee was told at BGU that the requirements are mandated across the country, it learned that at least other universities follow a different policy. Accordingly, the Committee recommends that BGU change its local policy to allow credits from certain courses to be applied both towards the MD and PhD degrees. This should make the MD/PhD program less onerous and more attractive to potential candidates.
  - vi. Consider how the courses and experiences offered in the two schools (Goldman and MSIH) might complement each other (intermediate term). For example, consider how pilots in one school might be extended to the other.
  - vii. For MSIH students, develop sufficient support and programs so that they acquire the Hebrew language skills necessary for professional communication with patients and staff.
  - viii. Carefully evaluate the likely impact on the resources (faculty, hospital sites, ambulatory sites) required by the Goldman School, particularly in light of recent and likely future class size expansion. (short term)

#### **Section 4 – HR/Faculty:**

- i. Formulate guidelines for continuing professional development/faculty development in education and training (short term)
  - a. Use the faculty development guidelines for documentation of activities by faculty (intermediate term)
  - b. Incorporate participation in faculty development into promotion criteria (long term).
- ii. Initiate high level discussions between BGU and the health system, especially Clalit and Soroka Hospital, to develop approaches that will facilitate the education, training, and research components of the work of all physicians and for developing a strong cadre of clinician scientists. (**See section 2i – above**)
- iii. In collaboration with the Sick Funds discuss with the Ministry of Health extending the premium pay award to family physicians in the periphery (short term).

### **Section 5 - Students:**

- i. Despite the fact that the present admission process is time-honored, it is highly resource intensive. It should be subjected to formal review of its effectiveness; and its outcomes should be compared to the other schools. (intermediate term)
- ii. Provide more information to students before each teaching event including greater detail about the content of the session, expected learning outcomes, and supplementary teaching materials. (short term)
- iii. Improve the preclinical frontal lectures. Actively involve students in the preparation of teaching materials. (short term)
- iv. Relieve students on the MD/PhD course of the need to take unnecessary or duplicate courses. (see Recommendations in Section 4).
- v. Formulate guidelines for faculty involved in education, training, and research about how students can get summer research placements (short term) and formulate guidelines for students to facilitate their getting summer research placements (short term)
- vi. The Goldman School should strengthen its relationship with its alumni by “community-building” efforts, for example, newsletters, alumni events and ongoing involvement in the development of the School. (intermediate term)

### **Section 6 – Teaching and Learning Outcomes:**

- i. Construct, as soon as possible, the planned simulation center, to make it more possible to facilitate competence-based learning (short term).
- ii. Ensure that the curriculum has specific and meaningful learning objectives for each course (short term).
  - a. Document student attainment of the learning objectives.
  - b. Create new methods to assess teaching effectiveness in addition to student opinion. Possibilities could include peer review (most likely to be an assessment of process); attainment of competence by learners (assessment of outcomes).
  - c. Determine the science base essential for future physicians by careful and thorough development of learning objectives for basic science courses.
- iii. Provide faculty development for all forms of teaching.

- iv. Enhance the current promotion process, which nominally considers teaching, so that there is greater consideration of teaching performance for all categories of promotion (intermediate term).
- v. Consider validating assessments of student performance against their results on the USMLE (long term).
- vi. Develop a process for assessing that students have met predetermined knowledge milestones and predetermined learning objectives, and that they achieve essential competencies (long term - ongoing).

### **Section 7 – Research:**

- ii. Consider local and national policies for developing physician scientists. (short term).
  - a. Advocate for a national policy on physician scientists. Just as residency programs are supported, a complete PhD and postdoctoral research experience should be supported.
  - b. The PhD component of the MD/PhD requires more than two years of work and thus requires more than two years of PhD support.
  - c. Make the MD/PhD program a truly combined degree program (See Recommendations in Section 5).
- iii. Advocate for new national policies related to the postdoctoral fellowship (intermediate term). Such policies are necessary in light of Israeli academia currently requiring an out-of-country experience. Foreign sources of support are drying up, and in many instances Israeli scientific institutions are as good as the best foreign ones. Furthermore, the need to leave the country may pose a particular problem for women with families.
- iv. Advocate for national development of strong and enforceable regulations on how much time, including on-call time, can be required of each faculty member in clinical fields in order to mitigate the uncertainty for the physician-scientist recruited into a faculty position about finding time to do clinical work and science (intermediate term). There are similar issues for the physician-educator, and the same types of rules are required. And, of course, the new physician faculty member who is part clinician, part scientist, and part educator faces these uncertainties both for doing science and for teaching. The need is clear; and it is essential to reduce the extraordinary and counterproductive expectations on the physicians involved.

**Section 8 – Infrastructure:**

- i. Construct, as soon as possible, the planned simulation center, to make it more possible to facilitate competence-based learning (short-term).
- ii. Evaluate the need for student study space and lengthening the hours that students can access the current space especially during examination periods (short-term).
- iii. Ensure that there is a good strategic plan specifically for the use of various types of simulation, e.g., standardized patients; and low, medium, and high fidelity simulators, to facilitate various types of learning, e.g., communications skills; technical skills interprofessional team interactions, in various types of settings, e.g., inpatient, ambulatory, etc (short-term).
- iv. Perform a formal assessment of available and potentially available infrastructure, both physical and human resources, under scenarios of various increases in total number of students and various proportions of Goldman School vs. MSIH students (short-term).
- v. Develop a Library strategic plan for ensuring that students and Faculty are supported for optimally efficient and effective self-directed and lifelong learning (intermediate term).
- vi. Develop and implement a plan for the expansion of faculty development for teaching and for assessing the effectiveness of faculty development activities. (See Section 5, Recommendation i)

**Section 9 – Self-Evaluation:**

- i. The Committee recommends that the Faculty of Health Sciences at Ben-Gurion University (and indeed the corresponding faculties at the other schools in Israel it has reviewed) develop formal strategic planning and review processes (short term)
- ii. Perform an internal review of the strategic plan not less frequently than every other year. (intermediate term)
- iii. The Committee recommends that this and all the corresponding faculties at the other schools in Israel of a similar type include in the future self-evaluation reports required by the Council for the periodic reviews by the Council a specific listing of all new programs generated in each two year period since the prior review and a specific listing of all challenges or problems that have been revealed in internal reviews with specific plans for addressing each in a time certain. (long term)

**Signed by:**



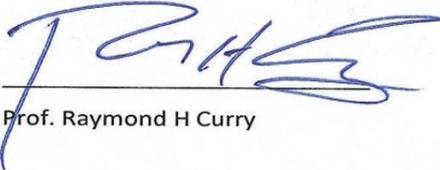
---

Prof. Stephen Schoenbaum – Chair



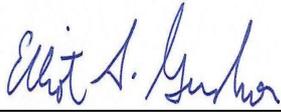
---

Prof. Peter Crome



---

Prof. Raymond H Curry



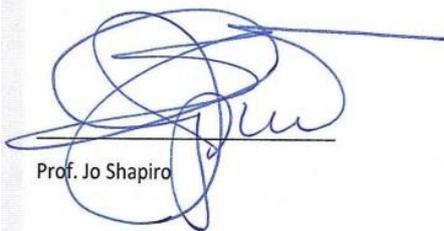
---

Prof. Elliot Gershon



---

Prof. David Katz



---

Prof. Jo Shapiro

**Appendix 1: Letter of Appointment**

February 2014

Prof. Stephen Schoenbaum  
The Josiah Macy Jr. Foundation,  
USA

Dear Professor Schoenbaum,

The Israeli Council for Higher Education (CHE) strives to ensure the continuing excellence and quality of Israeli higher education through a systematic evaluation process. By engaging upon this mission, the CHE seeks: to enhance and ensure the quality of academic studies, to provide the public with information regarding the quality of study programs in institutions of higher education throughout Israel, and to ensure the continued integration of the Israeli system of higher education in the international academic arena.

As part of this important endeavor we reach out to world renowned academicians to help us meet the challenges that confront the Israeli higher education by accepting our invitation to participate in our international evaluation committees. This process establishes a structure for an ongoing consultative process around the globe on common academic dilemmas and prospects.

I therefore deeply appreciate your willingness to join us in this crucial enterprise.

It is with great pleasure that I hereby appoint you to serve as the Chair of the Council for Higher Education's Committee for the Evaluation of the study programs in **Medical Studies**. In addition to yourself, the composition of the Committee will be as follows: Prof. Peter Crome, Prof. Raymond Curry, Prof. Shimon Glick, Prof. Jo Shapiro, Prof. Eliot Gershon, Prof. David Katz and Prof. Ora Paltiel-Clarfield.

Ms. Daniella Sandler will be the coordinator of the committee.

Details regarding the operation of the committee and its mandate are provided in the enclosed appendix.

I wish you much success in your role as the Chair of this most important committee.

Sincerely,

Prof. Hagit Messer-Yaron  
Deputy Chairperson,  
The Council for Higher Education (CHE)

*Enclosures:* Appendix to the Appointment Letter of Evaluation Committees

cc: Ms. Michal Neumann, Deputy Director-General for QA, CHE  
Ms. Daniella Sandler, Committee Coordinator

**Appendix 2: Site Visit Schedule**



**Site visit to Ben-Gurion University February 24-26.2.2014**

**Committee for the Evaluation of Medical Schools**

**Faculty of Health Sciences:**

**The Joyce & Irving Goldman Medical School**

**The Medical School for International Health**

**Day 1- February 24, 2014: Faculty of Health Sciences**

- The meetings will take place at the Faculty of Health Sciences, Caroline Students' House, Room 203

<b>Time</b>	<b>Subject</b>	<b>Participants</b>
<b>09:00-9:35</b>	<b>Opening session</b>  Introduction Rector Dean	Zvi HaCohen, PhD Gabriel Schreiber, MD, PhD
<b>9:35-9:50</b>	<b>Dean</b>	Gabriel Schreiber, MD, PhD
<b>9:50-11:10</b>	<b>School's academic and administrative leadership</b> Director, Joyce & Irving Goldman Medical School Director, Medical School for International Health Self-Evaluation & Report preparation Academic Promotion Curriculum Student Affair Students' Promotion Committee Year's Committees	Klaris Riesenber, MD Mark Clarfield, MD Emanuel Sikuler, MD Amos Katz, MD Doron Zahger, MD Eliezer Witztum, MD Dan Schwartzfucs, MD Tamar Bernstein, MD Batia Gvili, Smadar Burger,

	Medical School Senior Administrative Staff	Leaura Navi
<b>11:10 -12:30</b>	<b>Committees involved in pre-clinical education</b>  Early Clinical Exposure: Overview Communication Skills Communication: Patients with Mental Disorders An educational journey for medical students: Learning the Human Spirit Professionalism & Ethics Basic Sciences Biostatistics & Epidemiology Systems & Integration	Aharon Galil, MD Hana Castel, MD Itay Besser, MD Yaniv Almog, MD  Alan Jotkowitz, MD Yael Segev, PhD Amalia Levy, PhD Michael Hausmann, MD
<b>12:30-13:30</b>	<b>Lunch</b>	Closed door – committee only
<b>13:30-14:50</b>	<b>Committees involved in clinical education</b>  Clinical Education – Overview Teaching in the Community: Primary Care Teaching in the Community: Pediatrics Inter-professionalism Mentoring Program Simulation International Medical Education Teaching the teachers	David Greenberg, MD Aya Biedrman, MD Yaacov Levy, MD Asher Bashiri, MD Haim Reuveni, MD Yaakov Henkin, MD Alan Jotkowitz, MD Yaakov Urkin, MD
<b>14:50-15:30</b>	<b>Admission of Students</b>  Admission: Goldman Medical School Admission: MSIH Admission: disparities – Beduin & Disparities	Yaniv Almog, MD Mark Clarfield, MD Riad Agbaria, PhD
<b>15:30-16:20</b>	<b>Senior academic staff</b>  Problem Based Learning Psychiatric Clinical Education Divisional Clinical Education International Clinical Education	Eli Lewis, PhD Eliezer Witztum, MD Asher Bashiri, MD Tzvi Dwolatzky, MD
<b>16:20-17:00</b>	<b>Junior academic staff and Teaching assistants</b>  New Recruitments New Recruitments	Dan Levy, PhD Roi Gazit, PhD

	Mentor (Family Medicine) Mentor ("Nitzanai Refuah") Emergency Medicine	Robert Satran, MD Rania Okabi, MD Uri Netz, MD
<b>17:00-17:30</b>	<b>Closed meeting</b>	Committee members

**Day 2- February 25, 2014 Research and Students**

- **The meetings will take place at the Faculty of Health Sciences, Caroline Students' House, Room 203.**

<b>Time</b>	<b>Subject</b>	<b>Participants</b>
<b>09:00-09:45</b>	<b>Services for supporting teaching</b>  Medical Sciences Library Computing Committee Animals Research Facility & Committee	Daniel Flusser, MD, Tiran Ezra-Hames Akiva Lebovitz, MD, David de Leeuw Mahmud Huleihel, PhD, Shira Ovadia, DVM, DACLAM
<b>09:45-11:35</b>	<b>Research</b>  Research Excellence Promotion Program. Multidisciplinary International Research Graduate Students' Committee Final Research Project Siaal Research Center for Family Medicine and Primary Care Clinical Research Center Multidisciplinary Basic, Epidemiological & Clinical Research Multidisciplinary Basic & Clinical Research Multidisciplinary Basic Research Multidisciplinary International Research	Angel Porgador, PhD  Ron Dagan, MD  Michal Hershinkel, PhD Mahmud Abu-Shakra, MD Pesach Schwartzman, MD  Victor Novak., MD, PhD Assaf Rudich, MD, PhD  Yoram Etzion, MD, PhD  Michal Hershinkel, PhD Lesly Lobel, PhD
<b>11:35-12:25</b>	<b>Tour of the school</b>	Yaakov Pollack, Ph.D
<b>12:25-13:25</b>	Lunch	

<b>13:25-14:15</b>	<b>Students - first to third year</b>	
<b>14:15-15:00</b>	<b>Students - forth to seventh year</b>	
<b>15:00-15:10</b>	<b>Break</b>	Committee members
<b>15:10-16:00</b>	<b>Alumni</b>	
<b>16:00-16:45</b>	<b>MD\PhD students</b>	
<b>16:45-17:15</b>	Closed meeting	Committee members

**Day3 – February 26, 2014: Clinical teaching- visit to chosen clinics and hospitals**

- **Meeting Point: the Faculty of Health Sciences, Caroline Students' House, Room 203.**

<b>Time</b>	<b>Subject</b>	<b>Participants</b>
<b>09:00-09:30</b>	Deputy Director, Human resources Vice Dean for Curriculum & Clinical Teaching Coordinator	Nitza Neuman, MD Doron Zahger, MD
<b>09:30-12:30</b>	<b>Tour of Clinical facilities</b> Cardiology Department Imaging Department Community Teaching Clinic (Tel Sheva)	Doron Zahger, MD Ilan Shelef, MD Yaakov Levy, MD
<b>12:45-13:45</b>	Lunch	
<b>13:45-14:15</b>	Closed meeting	Committee members
<b>14:15-15:00</b>	Summation Meeting	Zvi HaCohen, PhD Gabriel Schreiber, MD, PhD Klaris Risnberg, MD Mark Clarfield, MD Emanuel Sikuler, MD
<b>15:00-15:30</b>	Closed meeting	Committee members

