

Committee Recommendation	Steps toward implementation (including time table)
<p><b>1. Mission and goal</b> The Biomedical Engineering Faculty undertakes a robust strategic planning process with a final report due in 8 months. This process specifically includes: (i) identification of targeted hiring areas; (ii) a plan and detailed rationale for growth in the number of faculty members.</p>	<p>The Faculty is undertaking a strategic planning process and has already convened Faculty meetings to discuss it. Target hiring areas were identified and growth in the number of Faculty members was outlined. A final report on the strategic planning will be submitted to the Technion by August 2017.</p>
<p>2. The senior administration work with the incoming Dean to develop a plan for faculty growth as outlined above within 4 months of the completion of the Faculty strategic planning process. This evaluation must also consider ongoing and potential fund-raising opportunities to support the BME Faculty.</p>	<p>The senior administration is working with the Dean to develop a plan for Faculty growth and potential fundraising opportunities. Several meetings have been held. The detailed plan for achieving the desired faculty growth will be completed 4 months after submission of the Faculty report.</p>
<p><b>3. Research</b> Within 8 months, develop a Strategic Plan for expansion in target areas, including hiring of additional faculty members. The committee recommends to select one additional disease area to be strengthened by expanding the 3 pillars of biomedical engineering in that disease area: tissue engineering/biomaterials, biomechanics and imaging. The goal should be to expand faculty complement from 16 to low to mid-twenties over the next 5 years. Possible disease targets include immunoengineering/cancer.</p>	<p>A strategic plan for expansion in targeted areas was developed. As suggested by the committee, Cancer research was selected as an additional target disease to be pursued in the Faculty. The BME pillars will be expanded and strengthened by hiring faculty members which will focus on the defined disease applications and will add strength to the pillar fields.</p>
<p>4. Improve routes of physical communication for faculty and students between the BME Faculty and the Medical School by establishing a dedicated shuttle and video-conferencing within 12 months.</p>	<p>Dedicated car services will be offered each semester to the students in the joint BSc/MD program, for transport between the campuses when courses are given on the same day in both campuses. In addition, video conferencing has been set up in the BME Faculty and the medical school to allow students to hear and take part in courses at both campuses.</p>

<p>5. Establish between 1 and 3 core facilities to share equipment (e.g. microscopy) as part of building improvements or a new building plan. Allocate technicians/research engineers to the facilities. The number and type of core facilities should be specified in the Faculty's Strategic Plan, to be developed within 8 months as noted above</p>	<p>1. The faculty is now finalizing the establishment of a new shared microscopy facility for high-resolution imaging at the BME building as part of the Technion National Infrastructure Center for Advancing Brain Imaging (TELEM). The TELEM lab is part of a multi-university center supported by the council for higher education. This R&amp;D branch at the BME was set up to develop and test high-resolution, three-dimensional functional imaging and stimulation methods in rodents. The core facility includes state-of-the-art multiphoton and opto-acoustic (photo-acoustic) systems for <i>in vivo</i> imaging, while the branch at the Technion's medical school develops customized coils suitable for advanced functional MRI imaging. This center enables advanced <i>in vivo</i> imaging and related R&amp;D, accessible to both academic and industry researchers.</p> <p>2. Following the committee recommendation, the Faculty is currently in the process of establishing another core facility for 3D bio-printing of cells and biomaterials. The core facility will be fully accessible and available, at an hourly charge, to all Technion faculty members. A lab will be renovated for this purpose and will include bio-printers, sterile hoods and incubator.</p> <p>3. The BME also recently established a shared facility for large centrifuges, large fridges and freezers, shakers and other equipment used by all researchers in the building.</p>
<p>6. Develop a framework for the transfer of the best commercialization practices from the more experienced to the less experienced faculty members so that the Faculty of BME as whole can have a larger impact on the real world</p>	<p>The BME faculty will tighten its interactions with the commercialization unit (T3) at the Technion. The Faculty will hold an annual meeting with a T3 representative, to expose all new researchers to the various commercialization opportunities. The Faculty will make sure to connect less experienced members with experienced T3 members, who will provide guidance</p>

	regarding the best commercialization practices.
7. Establish a formal junior faculty mentoring program	The Technion has a full support system for new faculty members including a dedicated seminar for new faculty members. Following the committee recommendation, the Faculty initiated a formal junior faculty mentoring program, in which each junior member is paired up with a more experienced mentor.
8. <b>Organizational Structure</b> Senior leadership continue to support the Dean of the Biomedical Engineering Faculty through suitable administrative assistance, e.g. the new administrative support individual negotiated by the incoming Dean.	Technion Senior leadership will continue to provide suitable assistance to the Faculty as needed.
9. Within 12 months, senior leadership streamline the student payment and ordering processes. If it is impossible to improve these processes, financial support (at least 1 FTE) be provided to the Faculty so that they can hire an administrator to assist with these matters	The Technion has recently implemented major improvements to the purchasing system and provided more support to the ordering process.
10. <b>Study Programs</b> Within 12 months, finalize planning for biomedical laboratory experience earlier in the program.	By December 2017, the Faculty will finalize the planning for biomedical laboratory experience and analyze whether it can be started earlier in the program. Currently, students begin to gain BME laboratory experience in the 3rd year.
11. Since innovation appears to be a priority in the faculty's educational strategy, indicate such learning outcomes in all relevant courses/syllabi (timeline 12 months).	By December 2017, all courses will include learning outcomes in their syllabi. Innovation will be emphasized.
12. Continue with the BSc/MD program and consider expansion of student numbers depending on available resources and depth of the student recruitment pool.	The BSc/MD program is growing every year. The Technion will further publicize the BSc/MD program to attract more candidates. The Faculty will collaborate with the School of Medicine to define and implement new strategies to increase the number of students in the program. A donation project has been defined to help finance students in this program. This will help and attract students to the program.

<p>13. Provide training and/or opportunities for PhD students to develop communication skills and to broadly publicize their research activity</p>	<p>1. The Technion provides technical writing courses for PhD students.  2. The Faculty will further provide training for PhD students to develop communication skills. The training will include workshops on career planning and management, CV writing, preparation of presentations and public speaking.  3. The Faculty will initiate an annual meeting for all faculty members and students, at which, students will present their work in the form of short talks and posters. This will develop their communication skills and assist them in publicizing their research activity.</p>
<p><b>14. Human Resources / Faculty</b>  The incoming Dean review the Faculty's promotion processes during her first year to ensure that there are no barriers at the Faculty level to a smooth process, including consultation with fellow Deans to learn of best practices for preparation of promotion files. Further, within her first year, the incoming Dean put mechanisms in place that ensure adherence to Technion timelines for promotion, as presented to us (see image below, as forwarded by a faculty member).</p>	<p>By December 2017, the new Dean will review the Faculty's promotion processes to ensure that there will be no barriers at the Faculty level.</p>
<p><b>15. Students</b>  Within 12 months, provide a transportation system (e.g., shuttle bus) to the medical campus to enhance student experience, breadth of training and the BSc/MD program.</p>	<p>A dedicated car service will be provided each semester for the students in the BSc/MD program, to commute between the campuses when courses are given on the same day in both campuses.</p>
<p>16. Within 6 months, determine if it is truly the case that there are less scholarship funds available to BME students (at all levels) vs. students in other Faculties. If this is the case, consider making scholarships a fund-raising priority.</p>	<p>The Technion is investing a very high portion of its budget in scholarship. Indeed, some Faculties have more scholarship funds available to students. The Technion will make BME scholarships a fund-raising priority.</p>
<p>17. Improve financial support for BSc/MD students. Specifically, immediately target fund-raising efforts for</p>	<p>The Technion provides undergraduate students with scholarships based on financial needs and excellence. Technion</p>

<p>fellowships for this student cohort. Further, designate this program as an Excellence Program, so as to provide financial incentives for this outstanding cohort of students.</p>	<p>will target fund-raising efforts for fellowships for this program.</p>
<p>18. As part of the Faculty strategic planning process, address the potential shortage and quality of teaching space</p>	<p>A detailed plan addressing the shortage of teaching space will be provided to the Technion as part of the general plan for Faculty building renovation and expansion. New teaching areas are now being renovated and added to the Ulman building, the main class room building in the campus, as a centralized area for teaching. These new classrooms will be available for the Technion faculties.</p>
<p><b>19. Teaching and Learning Outcomes</b> Within 8 months, incorporate learning outcomes into a standardized syllabus format, for example the syllabus for course 336359, Respiratory Flows &amp; Inhalation Therapy.</p>	<p>By August 2017, learning outcomes will be incorporated into standardized syllabus format similar to the course 336359 format.</p>
<p><b>20.</b> Establish mechanisms for periodic Faculty-level review of learning outcomes.</p>	<p>Each semester, there will be a meeting with a student representative to discuss learning outcomes. This will be reviewed and discussed at the Faculty meeting.</p>
<p><b>21. Infrastructure</b> Solve the animal transfer problem either by: (i) incorporating an animal facility within a planned BME building; (ii) utilizing a dedicated animal transfer service; or (iii) establishing an animal facility within a 5-minute walk of the Silver Building.</p>	<p>The issue is being taken care of by a special committee at the Technion to discuss the various options for solving the animal transfer problem.</p>
<p><b>22. Self-Evaluation Process and implementation of previous recommendations</b> Develop a plan for evaluation of progress towards the goals of the Strategic Plan once it has been produced</p>	<p>Each year, the Dean will meet with the Technion Senior leadership to review the strategic plan and define action items.</p>