University of Puerto Rico
Medical Sciences Campus
School of Medicine

Strategic Plan 2007-2012

Approved by:
Faculty of Medicine

and

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Dean of Medicine

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Table of Content

Introduction

This *Strategic Plan 2007-2012* is the result of a continuing planning effort of the School of Medicine whereby the School projects itself into the following years, with confidence and resolution, as one of the several excellent schools of medical education in the United States and certainly the most prestigious and comprehensive one in Puerto Rico.

The major responsibility for the Plan rested on the Strategic Planning Committee (Appendix A). However, the Plan is the product of significant participation and input from the academic community, including a wide cross section of the administration, faculty, non-faculty personnel, and the students.

The University of Puerto Rico (UPR) has just recently completed a comprehensive system-wide planning effort culminating in a ten year plan called *Ten for the Decade (Diez para la década)*. The School's *Strategic Plan 2007-2012* is purposely aligned with *Ten for the Decade.* Therefore, while moving the School forward, *Strategic Plan 2007-2012* should also contribute towards the attainment of the strategic goals set forth by the UPR System.

Critical Success Factors

As it should, this Plan was developed after an assessment of past accomplishments and unfinished objectives from the previous Strategic Plan. It also stems from a careful analysis of the internal and external environment in which the School operates. Although the Plan is structured according to the ten strategic purposes identified in *Ten for the Decade* its goals and objectives are, of course, designed as a response to the specific trends and developments that determine the critical success factors for the School, as a medical educational center. The reader interested in the details of the environmental analyses and the resulting implications is referred to the published reports[1]. A summary of the findings now follows.

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1 Available in the School's website: http://www.md.rcm.upr.edu.

Building lasting bonds with our students

The School is pressed to evaluate the quality of life that it offers its students extending its outlook to its surroundings. Issues pertaining to housing facilities, transportation, parking, extracurricular and social activities, internal and external security, service quality, and academic and personal support systems are all elements that are carefully factored in by the other schools of medicine in their enrollment management strategies. The UPR School must also look into these factors strategically.

There is no doubt that positive learning experiences and strong affective ties with the School eventually translate into an alumni that is closely linked to the School and willing to contribute to its continuing well-being.

Curriculum and academic assessment

Since LCME and ACGME accreditation requirements are well-defined and strongly enforced, curriculum development guidelines spell out much of what is required in terms of program development and accreditation. The big challenge, of course, is providing the resources and establishing the administrative and academic environment that can sustain program excellence and induce innovation, as required.

An improved outcomes assessment strategy must be put in place. It would include appropriate data collection stemming from basic educational processes and different assessment activities, appropriate data analysis techniques, and better use of Information Technology. Assessment of learning is generally course related, formative and ongoing. However, many faculty members have not yet made assessment of this type a part of their regular teaching. The School will move to ensure that this is the case.

The School has already engaged in curriculum revision, modifying courses or creating new ones to address several of the SMOP hot topics, respond to the imperatives of the professionalism charter, adopt quality performance measures in medical practice, and strengthen the development of research skills. Naturally this is an ongoing effort so the School must strive to maintain an effective curriculum revision effort.

The Curriculum Office should address the suggestions put forth by the faculty to provide support in areas related to medical pedagogy, good instructional design, and effective use of multimedia technology, both for in-class and online teaching. To increase development opportunities for the faculty, the training schedule should minimize overlap with clinical service periods.

Medical education must help students and doctors in training to develop skills in primary care and cost management alongside those related to specialized medical treatment. Also, the curriculum must stress the development of professionalism, social responsibility, and ethical values to ensure that patient care is the primary directive of the physician, not economic benefit.

If the idea of defining a core-teaching-faculty for each program is pursued, formal qualifying criteria must be established and clearly defined responsibilities for the core faculty must be agreed upon.

An annual plan for faculty professional improvement is required. Priority areas should be identified and addressed through several mechanisms such as sabbaticals, fellowships, short courses, workshops, and participation in conferences and symposia.

The requirement for more practice centers for medical training throughout Puerto Rico is a present need. The School must identify as many alternatives as possible to offset the tendency of private centers shutting down residency centers because of financial considerations.

Human Resources

The goal of achieving 100% board certified faculty should be seriously considered.

A thorough analysis linking present faculty resources to enrollment projections for existing or possible new programs and to research priorities should be carried out to determine the needs for additional faculty members, if any. If enrollment increases notably, additional faculty will be required. Still this can be minimized if existing faculty explore techniques for teaching large class sizes. The use of online teaching can be another alternative.

To reduce the need for additional non-faculty personnel, the School should focus on improving administrative processes and achieving higher efficiency levels through technology.

Research and graduate programs

Besides regular university funds, the School must continue to aggressively pursue external funding through competitive proposal writing. The development of a well-funded research endowment fund could also be an effective strategy to raise external funds.

NIH will continue to be the principal source of research funds for the School of Medicine. But given the proposed cuts, they will be more competitive. Therefore, research results must be published and advertised in shorter time periods, more projects must be aligned with federal priorities, and proposal writing skills must be optimal.

NIH reductions will probably entail fewer funds for doctoral or post doctoral programs. However, since the objective of advancing doctoral graduates among minorities is still a national priority, opportunities to create new bioscience programs or strengthen existing ones may still be open for Hispanic serving institutions such as the UPR School of Medicine.

Through some of its new research projects, the School could participate in the US cyberinfrastructure initiative. The federal emphasis on studying computer-human interactions could open research opportunities for the bioscientists and physicians in clinical research.

To capture a higher percentage of industry and private funds, the School's initiatives to add more applied and clinical research to its portfolio should continue.

The School of Medicine must assess its present Information Technology resources to ensure adequate support for its scientific teams.

Among several strategies to enhance the development of new researchers through its educational programs, include research skills development as a regular part of the basic medical curriculum.

Efforts to obtain a higher degree of integration or collaboration among the clinical and basic-research oriented faculty should continue. Curriculum revision to establish doctoral tracks fostering interdisciplinary research should also continue.

To determine the degree of adequacy of student enrollment gains in research-oriented graduate degree programs it is important that specific enrollment objectives **per program** be established. Logically, financial support for such programs would also have to increase. More postdoctoral graduate research fellows would certainly enhance research outputs.

The School would benefit from a a 5-year strategy to gradually increase laboratory space for research. At the same time, develop a long-range physical development plan.

Although the availability of regular university funds for the purchase of equipment is expected, proposal writers should include significant fund solicitations for this purpose.

The School of Medicine must assess its present Information Technology resources to ensure adequate development, technical support and training for its scientific teams. Making sure that the Medical Sciences Campus (MSC) participates in the new federal initiative to transform the cyberinfrastructure of the United States should be part of the School's priorities.

The use of "bridge funding" to finance first-level research opportunities may be essential to ensuring an effect entry of graduate students and new faculty into the world of research.

An organized and effective system for research outcomes assessment must be developed.

Developing an assessment culture

Formal assessment should be an integral part of the three dimensions of the university mission: education, research, and service. An improved assessment strategy would include appropriate data collection stemming from the outputs of regular basic educational, service, and administrative processes, and from different purposefully designed and implemented assessment activities, appropriate data analysis techniques, and better use of Information Technology.

The critical test to determine if assessment is part of the institutional culture is in the decision-making process. The School must demonstrate the value of assessment by making proper use of its results in decisions related to budget distribution, improvement projects, personnel promotions, and the like.

Information Technology

The School must ensure that its faculty and students can avail themselves of modern IT resources for pedagogical and research use. To be sure, a good IT infrastructure and a technical staff are needed; but a research and educational support structure going beyond purely technical issues is also required. The ability to provide online instruction to complement face-to-face teaching and, in the near future, to develop distance education alternatives is contingent on this.

Clearly, as more universities and training organizations offer accredited distance education alternatives for continuing education and health-related degrees, the traditional schools of medicine are faced with the prospect of loosing students. It may be that to offset the threat the UPR School of Medicine may have no other option but to develop its own offerings. The questions are: When? What courses or programs should be offered? What would be the target population? What organizational structures and human capabilities must be developed as pre-requisites to such an endeavor?

Research requiring high-level computing and high-speed online transmission of research data can now be conducted in the UPR. It is an opportunity which the biomedical scientists and research physicians in the School of Medicine should capitalize.

The time period for adopting Electronic Health Records (EHRs) gives the school of medicine some leeway to gradually phase in. It must acquire the necessary technology, as it becomes available, and train its medical and support staff to work in the IT environment. Of course, medical trainees will also have to develop the skills to work with EHRs.

Social responsibility (Community outreach)

In an effort to enhance the public image of the School of Medicine and in keeping with its social responsibilities, the School must strengthen its community outreach by participating in health improvement projects and providing its expertise for the development of public policies related to health care in Puerto Rico.

The School must continue to stress the development of professionalism, social responsibility, and ethical values to ensure that patient well-being is the primary mission of the physician.

Global Outlook

To better position itself in a global context, the School could increase institutional support for faculty and students to participate in international study alternatives; establish alliances or collaboration projects with research, education and health service organizations from other countries; and increase publication of research and educational outputs in international media.

Physical facilities

Space has been a limiting factor for the School of Medicine, affecting growth possibilities in student enrollment, clinical services, and research. Some temporary measures have been adding space, but unfortunately not all in the main campus building. In any case, the present strategy

promises some improvement, although a long-term solution would probably call for new facilities. To this end, it is essential that the needs of the School of Medicine be adequately addressed in the Capital Improvement Plan ("Plan de Mejoras permanents") of the campus.

The School must strive to permanently solve facility and service problems in the main building, related to inadequate electrical service, fungus contamination because of excess humidity, and faulty air conditioning units.

Management, operations, and financial stability

The federal budget deficit and rising military expenditures in the US imply that health costs must be trimmed and quality and efficiency of services improved in order to make the best use of diminishing public funds. The ability to produce results in a timely fashion is another factor to consider in the face of competition. Opportunities to develop new programs as new social needs arise will also be explored by the other schools. Thus, the UPR School must be in a position to respond quickly and effectively to the opportunities and challenges that occasionally come to its doorsteps.

Several quality improvement projects are deemed necessary, particularly focused at reducing unnecessary process redundancies. Also, the ability to generate and manage assessment data, using information technologies, must be significantly enhanced across all departments. It may not be necessary to overhaul the present administrative structure of the School. However, a formal management development program is highly desirable.

The expansion and enhancement of web-based processes and services should continue. This may not be a primary responsibility of the School of Medicine, but the School can influence the change-process occurring within other campus units leading the transformation. The UPR is now developing a system-wide administrative suite based on Oracle software. The School must ensure that its administrative personnel will be quickly integrated into the new Oracle-based system. This involves participation in the initial implementation phases and proper technical training.

Fund raising and effective proposal writing are skills that need to be continually improved to assure adequate operating funds to complement UPR assignments. The Development Office could be strengthened to help in this effort.

Initiatives are needed to assure that the financial opportunities opened by expanded facilities for the University Intramural Practice Plan (UIPP) materialize.

Strengthened Institutional Identity

It is recognized that public support for an institution augments when there is awareness of the institution's contributions to the community and in direct proportion to its public prestige. Therefore, although the School is highly valued at present, there is still room to enhance its identity and recognition factor. To attain this goal, the School should strive to increase its public visibility, among other things by developing strong and enduring ties with its alumni and the external community.

Methodology

The development of the Strategic Plan was coordinated by the School of Medicine Strategic Planning Committee (Appendix A), under the direct leadership of Dr. Walter Frontera, Dean of the School. An external consultant, Professor José L. Arbona[2], provided guidance and training during the entire one-year process.

The Plan was developed following the SWOT (Strengths-weaknesses-opportunities-threats) model. Under this model an analyses of the internal and external environments was carried out to determine the conditions under which the School is expected to operate during the next five-year period (2007-2012). The lessons learned were then translated into the goals and objectives that make up this Plan.

The internal environment was analyzed in a 5-hour workshop celebrated on October 20, 2006 at an off-campus site. The workshop was headed by the Dean with the assistance of the consultant. Information was also obtained from several assessment documents presented in September, 2006 by the Strategic Planning Committee after evaluating some School of Medicine outcomes of the past five years.

The workshop was attended by members of the Strategic Planning Committee and also included a good representation of teaching and research faculty; department heads, students, and administrative personnel. In all, 38 individuals participated.

The following six workgroups were organized, each with a written mission statement to guide their tasks:
- Administrative effectiveness
- Programs of Study
- Facilities and Equipment
- Human Resources
- Research
- Student Services

During their analysis, the workgroups relied on their knowledge of the internal environment as well as on supporting documents such as official reports and statistical records.

After completing their tasks, each workgroup presented their results in a preliminary written and verbal report to the general audience. The reports were subject to questions and discussion. As a continuation assignment, the workgroup coordinators later edited their reports clarifying and extending their findings. The consultant integrated the findings into the final Internal Environment Report.

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[2] Prof. José L. Arbona, former Director of the Office for Planning and Institutional Research at the University Puerto Rico at Aguadilla, is now Chancellor of that institution. He had also served as consultant to the School of Medicine during the first planning cycle in the year 2000-01.

The External Environment Report was commissioned to the consultant. The following areas were identified as of key importance and discussed throughout the resulting document:

- The Economy
- Public Health Care
- The Academic Medical Centers
- Issues in Medical Practice and Education
- Information Technology in Medicine
- Issues Affecting Research

The report was analyzed by the Strategic Planning Committee in one of its work sessions. It discusses trends and issues that in some manner represent conditioning factors, threats or opportunities for the School.

The environmental analyses reports as well as other supporting and reference documents were used as background information during the culminating workshop where the goals and objectives for the Plan were agreed upon. This final workshop was headed by the Dean and facilitated by the consultant on March 9, 2007. It involved the participation of the Strategic Planning Committee, department heads, some students, and administrative personnel.

Five subgroups worked on the analysis and development of a particular set of goals and objectives assigned to them. In several occasions the subgroups convened into the general assembly to report on their work and obtain approval of their propositions. After the workshop, the five workgroups' documents were integrated into the first draft of this Plan. After receiving some feedback from interested readers and additional improvement by the Dean and the Strategic Planning Committee the final version of the Plan (this document) was approved.

Vision, Mission, and Values

Vision

The School of Medicine is to become an institution ready, willing, and able to reconfigure itself in response to the changing scientific, social, and economic circumstances of its environment, through rapid and effective learning-by-doing and a willingness to experiment and innovate while maintaining and safeguarding its timeless core mission and values.

Mission

The main responsibilities of the School of Medicine are:
- To provide medical education centered in the development of competent and compassionate physicians.
- To develop capable scientists in basic and applied research, and sensitive to significant societal problems.
- To provide high quality clinical services and significantly promote the health status of Puerto Rico.

Institutional Values

The School is committed to:
- The promotion of high standards in the knowledge base and cognitive skills of medical education.
- Developing and maintaining a learning environment based on learning-by-doing, assumption of graded responsibility, acknowledgment of the uncertainties of medicine, and the development of problem solving skills and life-long learning habits.
- Accepting to be accountable to society for the resources received.
- Providing equal opportunity to its constituents, without discrimination due to economic or social status, sex, race, religious or political beliefs.

Goals and Objectives

1. Building lasting bonds with our students

<table>
<tr><td colspan="3">Relation to Ten for the Decade

Strategic Purpose I, Building lasting bonds with our students</td></tr>
<tr><td>Goal</td><td>Objetives</td><td>Indicators of success</td></tr>
<tr>
<td>1. Provide an academic environment that foster quality of life and a rich learning experience for students and residents.</td>
<td>1.1. Develop a strong student-oriented environment by

ensuring high quality student services
promoting positive professional relationships between students/residents and faculty members
providing a variety of good quality extracurricular and social activities
developing appropriate study and relaxation space for students' use

1.2. Develop continuous improvement projects of selected student services.

1.3. Increase economic assistance to students through scholarships, assistantships and fellowships.

1.4. Involve students in special institutional projects or activities (community outreach, program assessment, strategic planning, institutional committees, etc.)</td>
<td>

Number and description of activities
Number of participants
Level of student satisfaction according to annual surveys and focus groups

Assessment data related to service improvement (satisfaction, effectiveness, timeliness, web-based, accessibility, etc.)

Dollar amount and number of recipients

List projects/activities and describe student involvement

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2. Curriculum and academic assessment

<table>
<tr>
<td colspan="3">
Relation to <i>Ten for the Decade</i>

<i>Strategic Purpose II, Academic revision, experimentation, and renewal;</i>

<i>Strategic Purpose IV, Developing an assessment culture</i>
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<tr>
<th>Goal</th>
<th>Objectives</th>
<th>Indicators of success</th>
</tr>
<tr>
<td rowspan="2">2. Assure program quality and maintain favorable accreditation status for the Medical Doctor Program, all graduate residency programs, and those Biomedical Sciences Programs subject to external evaluation.</td>
<td>2.1. Develop and implement a comprehensive curriculum assessment plan taking into consideration current and new health and health related issues, and develop the appropriate support structure to implement it continuously.</td>
<td>Assessment Plan (including support structure)
Assessment reports
Evidence of actions taken as a result of assessment</td>
</tr>
<tr>
<td>2.2. Maintain an ongoing revision process of the Graduate Biomedical Sciences Curriculum to respond to the new developments in scientific research.</td>
<td>Assessment Plan
Development of new courses, PhD tracks, programs and areas of research
Related documents
Number of scientific research projects</td>
</tr>
</table>

Relation to _Ten for the Decade_
Strategic Purpose II, Academic revision, experimentation, and renewal;
Strategic Purpose IV, Developing an assessment culture

Goal	Objectives	Indicators of success
	2.3. Develop a longitudinal curriculum that incorporates clinical and basic sciences into the four years of the medical doctor program	• Yearly curricular evaluation workshops • Number and description of new educational experiences in the curriculum • Performance outcome of students in standardized exams, including USMLE and subject tests before and after changes.
	2.4. Strengthen and expand the existing clinical teaching sites to guarantee the diversity of clinical experiences for both medical students and residents.	• Increase in the number and diversity of clinical training sites.
	2.5. Strengthen the Faculty Professional Development Program including the residents and graduate students as teachers.	• A Faculty Development Plan • Performance of residents and graduate students as teachers • Increase in clinical and scholarly and recognitions and awards.
	2.6. Establish an ongoing recruitment plan based on departmental needs and accreditation requirements.	• Departmental needs assessment • Recruitment Plan • Impact analysis on departmental research, services and curriculum

13

Relation to *Ten for the Decade*

    Strategic Purpose II, Academic revision, experimentation, and renewal;

    Strategic Purpose IV, Developing an assessment culture

Goal	Objectives	Indicators of success
	2.7. Maintain full accreditation status for all GME programs.	• Number of accredited programs • Related documents/reports
	2.8. Develop a core faculty with protected time for teaching and research.	• Increased percentage of core faculty with protected time

3. Research and graduate programs

Relation to *Ten for the Decade*
Strategic Purpose III, Competitive Research and Creative Activities
Strategic Purpose IV, Developing an assessment culture

Goal	Objetives	Indicators of success
3. Establish the School of Medicine as a prominent research center n the United States and the leading research center in Latin America.	3.1. Develop an immediate plan to increase laboratory space for research and a long-range physical development plan for the same purpose.	• Plans fully developed by year 1 • New space (sq. ft.) allocated for research.
	3.2. Enhance the development of new researchers through the School's educational programs.	• Number of undergraduate students conducting research in SOM labs • Number of active graduate students • Number of medical students in the research track and combined degree programs • Faculty completing post-doctoral training • Number of graduates from the medical students in clinical research • Number of postdoctoral fellows • Number of residents completing a research track component

Goal	Objetives	Indicators of success
	3.3. Develop research opportunities and capabilities for students, residents and faculty through the sponsored research development initiatives, such as support for statistical analysis, scientific writing (grants and manuscripts) as well as regulatory compliance issues, under the endowed Health Research Services Center, Faculty Development Program and the Associate Deanship of Biomedical Sciences.	• Number of activities and participants in research support and development activities, such as seminars and workshops.
	3.4. Obtain a higher degree of integration or collaboration among the clinical and basic-research oriented faculty, promoting translational research.	• Number of research grants and contracts submitted and awarded involving both basic and clinical sciences faculty • Number of publications involving both basic and clinical scientists
	3.5. Establish doctoral tracks and programs fostering interdisciplinary research.	• Number of graduate students enrolled and completing interdisciplinary research tracks or programs in areas such as neuroscience, cardiovascular among others.
	3.6. Promote postdoctoral graduate research as a strategy to enhance research outputs.	• Number of postdoctoral fellows active in research • Number of publications involving work performed by postdoctoral fellows

Relation to *Ten for the Decade*

    Strategic Purpose III, Competitive Research and Creative Activities

    Strategic Purpose IV, Developing an assessment culture

Goal	Objetives	Indicators of success
	3.7. Enhance existing research infrastructure by the acquisition of state of the art equipment to support basic, clinical and translational research projects.	• Number and type of state-of-the-art equipment acquired and core labs devoted to this purpose.
	3.8. Further develop the established system for research outcomes assessment.	• Updated and user-friendly database on research outcomes parameters: publications, grants, contracts, presentations, editorial board membership, and student training, among others.
	3.9. Foster aggressive pursue of external funding through competitive proposal writing.	• Number of pre-doctoral training grants and fellowships submitted and awarded • Number of grants and contracts submitted and awarded to external funding agencies such as NIH, NSF, DHHS, industry, and government among others..
	3.10. Establish a Research Endowment Fund for a comprehensive Research Support and Development Program.	• Existence of the Endowment Fund for Research and its level of financial resources • Activities sponsored through these funds

Relation to *Ten for the Decade*		
Strategic Purpose III, Competitive Research and Creative Activities		
Strategic Purpose IV, Developing an assessment culture		

Goal	Objetives	Indicators of success
	3.11. Add more applied and clinical research to the School's research portfolio.	• Number of clinical sciences and translational research projects submitted/ awarded to faculty and students.
	3.12. Implement diverse strategies to achieve a critical mass of research in the basic and clinical departments	• Number of new basic science faculty, clinical sciences faculty and adjunct professors devoted to research (FTE devoted to research) • Number of Centers and Programs created, pursuing external funding and awarded in areas of research strength

4. Developing an assessment culture

<table>
<tr><td colspan="3">Relation to Ten for the Decade

Strategic Purpose IV, Developing an assessment culture</td></tr>
<tr><th>Goal</th><th>Objectives</th><th>Indicators of success</th></tr>
<tr>
<td>4. Effectively integrate formative and summative assessment activities into all major dimensions of the School's operations: teaching and learning, research, service, and administration.</td>
<td>4.1. Develop School's capability to perform effective overall institutional assessment, by
• Training faculty and administrative personnel involved in assessment
• Applying Information Technology to develop electronic databases, use web-based assessment alternatives, and expedite assessment reporting.</td>
<td>• Training statistics (activities, participants, costs)
• Developed e-databases and examples of use of IT for report generation</td>
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<td></td>
<td>4.2. Improve periodic outcome assessment for all goals included in this Plan, especially:
• Student services (goal 1)
• Program improvement and accreditation (goal 2)
• Research (goal 3)
• Information Technology (goal 5)
• Managerial oversight of institutional performance and finance (goal 9)</td>
<td>• See indicators for objectives:
  ▪ 1.1 and 1.2
  ▪ 2.1, 2.2, and 2.7
  ▪ 3.8
  ▪ 5.2
  ▪ 9.1, 9.5, 9.6</td>
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5. Information Technology

<table>
<tr>
<td colspan="3">Relation to <i>Ten for the Decade</i>

<i>Strategic Purpose V, Technological Update</i></td>
</tr>
<tr>
<th>Goal</th>
<th>Objetives</th>
<th>Indicators of success</th>
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<tr>
<td rowspan="4">5. Continue to develop the technical resources and support structures to ensure that the School of Medicine will be able to avail itself of modern Information Technology (IT) resources for pedagogical, research, and administrative use.</td>
<td>5.1. Increase faculty, student, and administrative personnel IT competencies through an effective training program.</td>
<td>Number of courses, seminar, and workshops given.
Number of participants per activity and per year.
Evidence of usage of IT in courses</td>
</tr>
<tr>
<td>5.2. Assess the School's present Information Technology resources to ensure adequate development, technical support, and training for its scientific teams.</td>
<td>Assessment Report
A 4-year Action Plan</td>
</tr>
<tr>
<td>5.3. Effectively integrate IT based educational materials into the mainstream of medical education, service, and research.</td>
<td>Number of courses that use IT based educational materials
Increase number of online instructional materials developed or purchased</td>
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<tr>
<td>5.4. Establish a research and educational support structure, going beyond purely technical issues, to assist the faculty to
provide online instruction (support traditional courses, provide online modules and simulations, offer online courses)
develop distance education alternatives
sustain research capabilities</td>
<td>Description and assessment of IT support structure
Number of online options and participants
Number and description of distance education alternatives and participants
Assessment of research IT support</td>
</tr>
</table>

Goal	Objetives	Indicators of success
	5.5. Obtain external funding for IT development through professional services, partnerships with research programs and faculty driven projects, as a complement to institutional resources.	• Number of Proposals submitted. • Number of Proposals approved. • Amount of funding and resources obtained from third parties.
	5.6. Acquire the necessary technology and train the medical and support staff to implement an Electronic Health Records (EHRs) system in the University of Puerto Rico Health Care System (ie. HUPR & IMPP Clinics)	• Number of Clinical Sites using system. • Number of Patients with EHR.
	5.7. Establish a Tele-Health Network to serve as a platform for research, clinical, and educational activities for the School of Medicine.	• Number of Sites connected • Services given through the Network • Number of activities
	5.8. Implement and enhance presentation, automation (control) and communications technology in all of the School's classrooms.	• Number of Classrooms fully equipped. • Number of technologies applied.
	5.9. Develop a central document repository and database systems for information sharing and workflow management in research, clinical, administrative, and academic affairs.	• Number of databases developed. • Number of deanships, departments, units, users, centers and programs using the systems.

6. Social responsibility (Community outreach)

Relation to *Ten for the Decade*		
Strategic Purpose VI, Leadership in community outreach and cultural impact		
Goal	**Objetives**	**Indicators of success**
6. Participate in health improvement projects and provide expertise for the development of public policies related to health care in Puerto Rico.	6.1. Enhance community clinical service programs to help alleviate public health problems.	• Description of programs and statistics showing outcomes (number of beneficiaries, number of programs, collaboration initiatives and quality assessment data)
	6.2. Participate in public debates and analyses regarding proposals for public health care.	• Number of interventions • Results in public policies
	6.3. Enhance the development of professionalism, social responsibility, and ethical values to ensure that patient well-being is the primary mission of the physician.	• Participation of students, residents and faculty in community clinical service programs • Participation in faculty development activities related to community service • Participation of students in mentoring activitie
	6.4. Enhance public image of the School of Medicine.	
	6.5. Assert leadership to develop the Academic Medical Centers (AMCs).	• Establish an effective Public Outreach and Relations program • Description and statistics of AMC contributions to medical education, research, and services

7. Global Outlook

Relation to *Ten for the Decade*		
Strategic Purpose VII, A Global Outlook		

Goal	Objetives	Indicators of success
7. Increase number of student and faculty participants in international exchange programs, internships, and/or one-year or summer international study alternatives.	7.1. Develop and implement a plan to increase institutional support for faculty and students to participate in international study alternatives in areas of health education, pure and applied biomedical research, and clinical services. Among other things, the plan should include: • A promotional strategy to communicate opportunities and services • Definition of support services that would be provided before and while the individual is studying abroad • Assessment of activities and services • Database of participants • Clear criteria for professional/program recognition of studies • Proper coordination with the Registrar for course validation	• An operational Plan by the end of year 1. • Assessment criteria defined in plan • Submission of a
	7.2. Establish alliances with organizations in research, education and health service, where resource sharing would be of mutual benefit.	• List and description of alliances including level of participation
	7.3. Participate in international collaboration projects.	• List and description of projects
	7.4. Increase publication of research and educational outputs in refereed journals, the School's web site, and other global media.	• Bibliography and statistics of publications

8. Physical facilities

<table>
<tr>
<td colspan="3">Relation to Ten for the Decade

Strategic purpose VIII, Efficiency and esthetics in natural spaces and buildings</td>
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<tr>
<th>Goal</th>
<th>Objetives</th>
<th>Indicators of success</th>
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<tr>
<td>8. Improve the physical facilities on campus and those used for clinical education off-campus.</td>
<td>8.1. Reallocate space for teaching, research, and services through the remodeling of existing facilities and reassignment of functions (teaching, laboratory, clinical practice, office, etc.), as needed.

8.2. Reassess space reassignment needs at least every three years.</td>
<td>

Evidence of implementation of an annual or biannual evaluation of the efficiency of use of teaching and administration space, modeled after the system presently in use to evaluate efficiency of use of research space.
Annual listings of all remodeling projects
Statistics of space distribution, by function and area assigned

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<td>8.3. Assess the viability and convenience of developing a proposal for a new Medical School Building to be included in the Medical Sciences Campus Capital Improvement Plan ("Plan de Mejoras Permanentes").

8.4. Develop a Plan –if viability study is positive – for a new School of Medicine.</td>
<td>

Completion of a "needs and viability" study regarding the proposal for a new Medical School Building.
Complete the design for a new medical school building
Identification of funds for a new Medical School Building.
Identification and securing of a site for a new Medical School Building.

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Relation to *Ten for the Decade*		
Strategic purpose VIII, Efficiency and esthetics in natural spaces and buildings		
Goal	**Objetives**	**Indicators of success**
	8.5. Permanently solve facility and service problems in the main building, related to inadequate electrical service, fungus contamination due to excess humidity, and faulty air conditioning units.	• By year 1, complete evaluations by external contractors (degree of the problems and estimated costs) • Completion of at least one project every 2 years.

9. Management, operations, and financial stability

<table>
<tr>
<td colspan="3">Relation to Ten for the Decade

Strategic Purpose IX, Management and administration optimization</td>
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<th>Goal</th>
<th>Objetives</th>
<th>Indicators of success</th>
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<td>9. Optimize the overall management and operations of the School and strengthen its financial basis with extra university funds.</td>
<td>9.1. Develop and implement a continuous development program for top management, department chairs, and other high-level administrative personnel. Among several areas, the program will include:

• Training and authorization of departmental administrative personnel to become direct purchasing agents.

• Training and authorization of departmental administrative personnel to fully process contracts of technical, administrative, research, clinical and teaching support personnel.

• Training and authorization of departmental administrative personnel to manage funds from external sources (e.g. federal research grants, etc).

• Training on process improvement techniques focused at reducing unnecessary redundancies and controls

• Developing capabilities to generate and manage institutional, program, and financial assessment data using information technologies.</td>
<td>• Official documents from the Associate Deanship of Administration formally creating and describing the nature of the program, person in charge, rules under which it will function and recurrent source of funding for support.

• Annual reports listing and description of activities (e.g. workshops, training conferences, electronic courses) offered or sponsored through the program (including titles, descriptions, objectives, resources, time, credits, etc.)

• 100% participation compliance* by the higher-level administrative personnel and department chairs, as evidenced through their annual performance reviews. [*target number of activities or credits to be required per year to be determined when the program is created].

• Levels of satisfaction of 75-80% in written evaluations by immediate supervisors and those being supervised or receiving services by these administrators</td>
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Goal	Objetives	Indicators of success
	9.2. Decentralize functions to the Departments granting them the responsibility and authority to directly manage certain resources and administrative procedures so that they can become more efficient and better focused towards the individual needs of the units, placing emphasis on the following: • Creation of departmental accounts to which an operational budget is transferred annually from the Deanship (these budgets will be based on accordance of yearly plans with the School's Strategic Plan). • Training and authorization of departmental administrative personnel to become direct purchasing agents. • Training and authorization of departmental administrative personnel to fully process contracts of technical, administrative, research, clinical and teaching support personnel. • Training and authorization of departmental administrative personnel to manage funds from external sources (e.g. federal research grants, etc).	• List of projects and procedures fully managed within the departments. • At least 30% reduction in processing time of decentralized processes • At least 80% overall satisfaction levels measured through assessment surveys or focus group discussions

Relation to *Ten for the Decade*
Strategic Purpose IX, Management and administration optimization

Goal	Objetives	Indicators of success
	9.3. Expand and enhance web-based processes and services related to the School's operations, including • Travel authorization requests • Requisition and Purchasing approvals • Online or e-mail-based system for signing up for at least 75% of activities that require reservation • Web-based assessment instruments available for all critical administrative processes • Availability of online versions of at least 50% of workshops and trainings that the faculty and personnel are required to take (e.g. ethics, lab security, animal care, etc.). • An electronic or e-mail-based method for signing up for at least 75% of activities that require reservation. • A website section for each faculty member for them to enter and maintain their own data on measures of productivity and other activities.	• Online manual listing and describing all administrative procedures applicable by the School • At least 70% of forms will be available for online processing • Training opportunities listed in website • At least 50% of training registrations will be placed online • Faculty productivity data available online • Documentation of assessment results and logs of corrective actions

Goal	Objetives	Indicators of success
	9.4. Improve overall design, content, and functionality of the School's website, including: • Inclusion of an organizational chart with links to all unit web pages (website map) • Inclusion of a feedback mechanism to encourage users to contribute to improving the logic, organization and nature of the information provided • Web availability of regularly updated databases of faculty publications, external sources of funding, on-going research projects, etc.	• Assessment sheet for periodic assessment of website • Assessment results
	9.5. Enhance the ability to generate and manage assessment data, using information technologies, by • Developing electronic databases designed to address information requirements for institutional, program accreditation, and research assessment needs • Developing electronic reporting capabilities through online queries	• Develop List of electronic databases providing assessment data • Report outputs using online queries or based on online data • Log of actions or responses generated as a result of assessment activities

Goal	Objetives	Indicators of success
	9.6. Establish a quality improvement cycle to successively and selectively improve critical processes in need of attention (e.g. recruitment and contract renewal, personnel supervision and evaluation, space use, building maintenance, purchasing, technology support, etc).	• List of annual improvement projects • Annual assessment reports of improvement outcomes and corrective actions taken, sent to the Associate Deanship of Administration and/or the Dean of Administration of the MSC. • Client approval rates should equal or exceed 70%
	9.7. Ensure proper link between the Strategic Plan and the annual budget.	• Inclusion of direct reference to specific goals and objectives of the Strategic Plan in all requests and approvals for funding. • Requirement of inclusion of numbers referring to specific goals and objectives of the Strategic Plan in requisitions for purchase orders, contracts and other recruitment and compensation documents. • Annual reports by Departments and Associate Deanships on funds spent for each goal/objective combination addressed during the year.

Strategic Purpose IX, Management and administration optimization

Goal	Objetives	Indicators of success
	9.8. Increase the School's Research Endowment by combining strategies such as: • Establishing an Office for Research Alumni (MS, PhD, MD/PhD, Masters in Clinical Research) that will serve to maintain a constant link between alumni and retired faculty and the institution. • Organizing several fundraising activities per year. • Creating a web page for Research Alumni & Friends with information on the School's research projects and programs, alumni directories and success stories, sale of alma mater memorabilia, a pay-pal or other means of making direct on-the-spot contributions (with the option to earmark for research projects, student fellowships, infrastructure, etc), information on planned and past activities (reunions, conferences, continued-education workshops or courses, fund-raisers, etc). • Publishing an annual or semiannual booklet with material similar to that showcased in the website to mail to alumni, along with a letter asking for support.	• 10% annual increase in the endowment until the goal of one million dollars is reached (the endowment can then be invested to continue producing recurrent funding)

Relation to *Ten for the Decade*		
Strategic Purpose IX, Management and administration optimization		

Goal	Objetives	Indicators of success

	9.9. Improve faculty success rate in obtaining external funding for research through proposal submissions, by
	   • Providing protected time for faculty during periods of proposal writing.
	   • Guarantee accessibility to a statistician, a scientific writing consultant, and a grant writing facilitator to work directly and exclusively to aid the faculty in project development and proposal writing
	   • Providing funds to support faculty travel to meet with funding agency officials, as well as to support collaborations abroad with experienced and/or established researchers, and obtain further training in new methods and techniques.
		• Percent of approved grants
		• Quantity of grant monies
		• List of research projects, per department, with external funding

	9.10. Increase the University Intramural Practice Plan (UIPP) outputs by increasing service activities and quality, enhancing marketing strategies, and improving billing effectiveness and fund management capabilities.	• Adoption of a formal Business Plan • Full revision of the UIPP Rules and Regulations • Service statistics • Client assessment results • UIPP funds

10. Strengthened Institutional Identity

	Relation to *Ten for the Decade*	
	Strategic Purpose X, Strengthened Institutional Identity	
Goal	**Objectives**	**Indicators of success**
10. Enhance institutional identity and prestige by increasing the School's public visibility and developing strong and enduring positive ties with alumni and the external community.	10.1. Effectively publicize the School's contributions and successes among the academic community and the general public.	• Quality and frequency of communication efforts (press releases, radio programs, brochures, website content, articles, newsletter, etc.) • Quality and frequency of activities related with alumni relations • Effectiveness of alumni fund-raising activities • Quality of alumni web site
	10.2. Strengthen the ties between the School and its alumni to the point where the latter becomes a significant patron and social ally of the former.	• List of alumni activities and corresponding assessment results • Degree of alumni participation in academic activities (mentoring, program assessment, … • Alumni sponsored Scholarship/Fellowship
	10.3 Cultivate enduring ties among the students and the institution (through quality of services, extracurricular activities, good support structures, and effective participation in university life.)	• Positive student assessments of institutional programs, support structures, and services • Degree of students participation in institutional affairs • Degree of donations of recent graduates

Goal	Objectives	Indicators of success
	10.4 Cultivate enduring ties with private enterprise –through quality of educational, research and consulting services, collaborative projects, and quick response to their needs– as a means of ensuring willingness to provide donations to the School.	• Number of collaborative agreements and service contracts • Service contracts • Level of participation of enterprise representatives in School's activities • Amount of donations (funds and equipment)

Appendix A – The Strategic Planning Committee

Dr. Walter Frontera	Dean
Dr. Yolanda Gómez	Assistant Dean for Graduate Medical Education and Acting Associate Dean Clinical Affairs
Dr. Gladys H. González	Assistant Dean for Students Affairs
Dr. Guido Santacana	Associate Dean for Academic Affairs
Dr. Walter I. Silva	Associate Dean for Biomedical Sciences
Mr. Roberto Acevedo	Associate Dean for Administrative Affairs
Dr. Jean Turnquist	Department of Anatomy
Dr. María del R. González	Department of Pediatrics
Dr. Nelson Escobales	Department of Physiology
Dr. Juan González	Department of Emergency Medicine
Dr. Miguel Maldonado	Department of Family Medicine
Dr. Débora H. Silva	Curriculum Office
Dr. Carmen López	Department of Physical Medicine
Dr. Julio Colón	Department of Pathology
Dr. Adelfa Serrano	Department of Microbiology
Dr. Carlos González Aquino	Section of Otorrinolaringology
Mr. José L. Quiñones	Center for Informatics and Technology
Dr. Héctor F. Gorbea	Director, Continuing Medical Education Office
Dr. Myrna Quiñones	Alumni Office
Ms. Doris Salgado	Development Office
Mrs. Marta I. Merced	Associate Deanship Administrative Affairs
Mr. Efraín Piñero	Executive Director, PPMI
Dr. Francisto Otero	Section of Orthopedics
Dr. Orlando De Jesú	Section of Neurosurgery
Dr. Antonio Puras	Section of Urology
Mr. Fernando Sepúlveda	MS I
Mr. Jomar Suárez	MS II
Mr. Christian Schenk	MS III
Mr. Yussel C. García	MS IV
Mr. Odrick Rosas	Doctoral Program Student
Dr. Joel Frontera	Resident