Questions—Biweekly and Answers

Question #1: August 11, 2008

What would you like others to say about DMS-our school-ten years from now?

* Months ago you posed the question, "what would you like others to say about DMS-our school-ten years from now?"
We brainstormed ideas at our OCER meeting and came up with the following:
1. DMS as a leader in creation, distribution, and use of evidence-based medical education
2. Medical school linked and having collaborative partnering with the local community
3. Integrative health care leader
4. A school with global respect for its excellence in diversity and appreciation for other cultures and shared decision making.

* I would like people who have not visited us to know about us to the point where they say what people who come here say to us now. This has happened three times in the last few weeks, although the word mecca has been substituted for jewel. So, for someone who has not been here it would go like this. "I hear that place is a jewel", as opposed to what a woman representing the Keck Foundation said on a recent visit "You are the best kept secret."I just finished having lunch with a candidate for Chief of Infectious Disease and International Health. Apparently the Pulmonary Chief at his current Institution told him we are a jewel. So, that is certainly good.

* There are two primary goals for any medical school: medical education and medical research. We can call our educational efforts excellent. Without continuous improvement, we will lose that designation, but we're starting from a strong position. Medical research has one goal: improving human health. Whatever we can do to most improve our probability of achieving that goal and maximizing its impact must be done. Basic research has a chance to make a bigger impact in a longer time, while applied research is nearer-term and more focused in its benefits. In either case, the discoveries and inventions that are made in the lab must be turned into products before they can help even a single patient. As a medical school, we will not become drug manufacturers or device distributors,
but we have a critical role to play in the value chain. We must define the role (e.g. pure research, research + development, research + development + early stage trials..., etc.), and we must then commit to performing excellently in that role. Whether we're doing fundamental research, creating intellectual property, or transferring knowledge to those who will advance our work to the patients, we must be world class. If we are not, both the probability of achieving our goal and our impact will be diminished. In ten years, I want people to say, "DMS innovations saved more lives and increased the quality of more lives than any other medical school". I can't imagine a loftier, nobler, or more appropriate goal.

Some other thoughts:
* Our educational efforts are excellent.
* We are top-caliber with regard to the research we carry out.
* Our teaching and healthcare are evidenced-based and forward-thinking.
* It is folks' (students, faculty, and staff) first choice because we are top quartile among medical schools in the US, and because we are part of a nationally recognized medical center leading the nation in the transformation of health. The name "Dartmouth" connotes high quality in education, research, and clinical practice.

* Our graduates understand breakthroughs in medical science, assume important roles in the healthcare system, and contribute to the health of populations--and know what they're getting into when the join the medical profession.
* DMS produces leaders, thinkers, and contributors to healthcare.
* We consistently produce graduates that are leaders and caring and compassionate physicians.
* DMS is known for giving students individual attention and mentorship.
* DMS innovations improve health and save lives.
* We have a racially and ethnically diverse faculty.
*DMS values all its employees--faculty, clinicians, researchers, educations, administrators, staff.
* Our leaderships examine their jurisdictions for improvement.
* We've figured out governance issues among the entities--College, DMS, Clinic, Hospital.
* We do long-term planning. We chose to get better rather than bigger.
* Visibility--that people who have not visited us, know about us.

* More two cents' worth from me on the strategic planning/where would you like us to be in 10 years issue:

*I'd like to see more generous support of all administrative offices. I think a lot of us take pride in accomplishing our administrative tasks while simultaneously pinching pennies, but I also think if we aspire to be seen consistently in the company of the nation's best medical schools, we'll need to do more. There's a lot that the admissions office could do with more resources (human and otherwise) that we can't really consider now.
*On another topic (and I don't know if this reaches the level of strategic planning or not), I think the system of placing college employees who work in medical school offices in a different annual raise pool than college employees who work in college offices is unfair. We work as hard and we work as well. We don't pay any less for tickets at the Hop or the Skiway or for heating our houses . . .

* I'd say that DMS should market "trust" to the community, by implementing evidence based practices and using decision aids to ensure that we teach and demonstrate the provision of appropriate, patient-centered health care, not just more health care.

It's my first choice (for students) because DMS is benchmarked in the top quartile of medical schools in the U.S.
*It's my first choice (for students) because it is closely affiliated with a nationally recognized medical center which is leading the nation in the transformation of patient care.
*It's my first choice because the "Dartmouth" name connotes high quality in education, research, teaching and clinical practice. (students is meant to generically encompass all).

* I'd like others to say that DMS gave its graduates the foundation to:
1) Understand the new breakthroughs in medical science.
2) Develop a satisfying role in the healthcare system.
3) Contribute to the health of more then just their immediate patients.
4) An understanding of what they were getting into when they joined the medical profession.

*This would be measurable as leadership within the domain of healthcare in any one of the following: community, practice, region, professional organization. Therefore, I'd like others to say that DMS produced thinkers, leaders, contributors in healthcare.

*Among the things I'd like to have people saying about DMS in 10 years is that it has a racially and ethnically diverse faculty. Sooner than 10 years on this issue would be even better.

*I think an important image goal would involve excellence in academic medicine and research. Though we are a small institution, I would like others to view us as top-caliber with regard to the research projects that we carry out. Likewise, I would like others to recognize our medical care and teaching as evidence-based and forward-thinking. One critical aspect of this is to continually strive to do each task as well as possible, valuing previous tradition but not feeling obliged to follow this tradition if it compromises quality and efficiency. I think it is key to hire and maintain department leadership that is willing and eager to examine their jurisdiction for underperformance and push for constructive improvement. One important tool in improving the effectiveness of the medical school has already been implemented: the restriction of medical personnel from receiving gifts from pharmaceutical companies. I believe we should continue to reduce monetary bias; for example, by forming a leadership group that would encourage the adoption of federal laws to restrict direct-to-consumer drug marketing. This advertising pushes the market away from ideal medical solutions, as pharmaceutical companies apply significant advertising costs to the prices of medicines. Funds would be more wisely spent in additional research, or communication of data to physicians or the public. Perhaps such a leadership group could brainstorm and encourage the adoption of laws that permit pharmaceutical communication of facts (clinical trials, etc.) but not slogans or other propaganda.

* I'd like it said of us (10 yrs hence) that we chose to get better rather than bigger.

* It's an institution that truly values all its employees ... faculty, clinicians, researchers, educators, administrators, and staff. It has benefits and programs that support the health and well-being of all who do its work and all of their family members/partners.

* I would like to hear that DMS consistently produces graduates that are leaders, caring and compassionate physicians who care about working with underserved populations. And that DMS is known for its small size where students get individual attention and mentorship while maintaining excellence at the same time.

* ... that the priorities of the school and the outcomes of its teaching somehow resonate ever so nicely with other strengths & features of the College, the medical-center, and the area in which we live.

*We have fabulous programs in Business, Engineering, Biology, and TDI.

*We live in a lovely area, with opportunities for sophisticated medical work, and rural exposure, and VA involvement.

*The College is small (on purpose) and oriented to the "liberal arts" (on purpose).

*Let's go there. Interdisciplinary. Broader, not narrower. Smarter, not manic, not exhausted.

*FULLY hooked up with TDI, and as hooked-up as possible with Tuck and the "Arts and Sciences..."

*Needed: a family practice residency.

*I would like Dartmouth trained docs to be known for having compassion for their patients.

Question #2: August 25, 2008

Would most of the key strengths, issues, and opportunities find a home in at least one of the above subcommittees? We realize that some "meta-issues," such as finances, cross all facets. But what isn't immediately classifiable, like, perhaps, "International Programs"? Please let us know!

* Do public health (education?) and clinical outcomes improvement (research?) fit into your subcommittee structure??? How about applications??
I realize I'm too late for Question #1, but I would like to add for DMS to be seen as a teaching institution that successfully marries medical education and public health.

* I had a chance to review this last night. I didn't see any mention/representation of the Bridging Program and our alums. I know DMS values the relationships it has with our alums, and the Bridging Program works hard to create lasting and meaningful ways to connect students with alums. Please consider alums and the bridging program in your strategic planning efforts.

* I would like to add diversity & international programs as an area of special focus as that I believe is an area of growth and potential opportunity to strengthen the DMS experience.

* I agree that global health programs cut across the first 3 - education, research and students/faculty. Hopefully can get attention through each of these committees.

* My thoughts about this week's question relate to the response that I meant to have sent to the previous question. So, I will try to answer both.

-Because we live in a very rapidly changing world, it is likely that DMS' national reputation in medical education and our ongoing success of DHMC as a health care provider will be shaped by our ability to be proactive relative to the changing demographics (aging population), likely changes in the way that health care is paid for (public vs. private), likely continuing decrease in funding from NIH and a need to respond to health care needs with less resources than are available today. I hope that ten years from now, our reputation will be for the proactive leadership we will have provided in solving changing health care and educational needs. All of your committees will likely need to consider the need for proactive institutional leadership in order for us to be ahead of the curve a decade from now. Thank you for including us in this process.

*What is our "identity"???

* I think the culture of DMS is not easily placed in any of these categories. What is valued here? research ,patient care, education? If you value one of these then you will get the resources and infrastructure to succeed.

* I am not sure where the issue I am raising would fit, but here it is:
There is a clear disconnect between the work of TDI and the clinical practice at DHMC. Since both carry the Dartmouth name, there is great potential for us to be contradicting each other publicly. I think some person or group should be charged with looking at this. It is potentially very embarrassing and damaging to the reputation of one or both of these parties. Thanks for providing the opportunity for feedback.

* I'd say that improvement is an important aspect of each of the components listed - I'm not sure whether "organizational learning" or "ongoing improvement" should be emphasized as part of each module, or should be a separate module that would be accessible to all other modules. To remain competitive, it will be important in the future to constantly improve our performance in each of the listed areas - education, faculty development, research, etc.

* Where do you think a discussion of future research computing needs at DMS fits in?

Question #3: September 8, 2008

What should DMS do to be wildly creative and imaginative in medical education and research? How could we be truly groundbreaking? Be general or specific; let creativity fly!

* Reduce dependence on extramural funding for initiating innovative research.

* Reward innovation generally: have competitive awards (for students, postdocs, PIs) for innovative research projects requiring minimal preliminary data and encouraging collaboration (similar to the Prouty Pilot Project Grants through NCCC, but DMS-wide and not limited to cancer).

* Develop an innovation fund to help develop novel ideas when they first arise. (Allow for salary support, relief of clinical responsibilities.)

* Create incentives for people to collaborate. Provide pilot funding to support innovative *teams*.

* Decentralize success by hiring very good, entrepreneurial people and resourcing them and those already here who seek to build interactive research programs.

* Re-establish a nursing school.

* Use technology creatively in teaching anatomy. (For example, CT cadavers before dissection so students learn how the 3D relationships they see in the cadaver correlate with the 2D image.)

* Re-emphasize the basics of physical diagnosis.

* Actively counsel and educate the patient population about lifestyle and dietary factors that influence health.

* Mandate pre-matriculation or post-graduation work/study/volunteering outside the four-year curriculum--for instance, year abroad, national or international volunteering, laboratory research.

* End tuition for all students, or for students whose families make below a certain threshold (a la the College), and replace loans with scholarships in the financial aid package.

* Headstart our students as trainee physicians by focusing the last half-year of school on certification in core technical clinical competencies (e.g., BCLS, ACLS, intubation and airway management, suturing, tube thoracostomy and central line placement, Foley placement, anoscopy...). More clinical training, in general.

* Invest in the broad use of technology to support education. Support faculty who have an interest in applying technology to improve their teaching.

* Differentially tuition students (lower tuition) who pursue primary care.

* Attract students interested in health policy and research. Require all students to get a degree (MPH, MS) from TDI, as well as the MD degree.

* Alternative and complementary medicine--include these in the curriculum.

* The DHMC campus needs tennis courts, basketball courts, and probably a track.

* Have non-structured informal meetings to facilitate faculty and student relationship development. A great example of this is the coffee hour in Borwell. An institution-wide policy with something like this, perhaps once a month, could bring about mentoring, collaborations and lasting relationships, and could easily be alternately sponsored by different departments.

* Daycare centers at the hospital and medical school. Support families and work-life balance.

* I would like to see a formal mentoring program of junior faculty by senior folks with a focus on supporting individuals in their career development and progress towards academic program. There some environmental challenges that we face in recruiting talented people to the Upper Valley (for residency or faculty positions).
* Increase the amount of office space available so that ALL faculty can have a private office.

* Equip medical students with the knowledge and skills needed to meet the challenges of individualized molecular medicine. Develop a curriculum that will provide our students with an understanding of the molecular basis of disease and therapy, along with the skills needed to organize and apply this information to benefit each patient.

* How about thinking of starting a Dartmouth Dental School? We are in dire need of Dentists in the Northeast.

* I read with interest your recent update about the DMS strategic planning work. If there is "room" for discussion about enhancing interprofessional education within DMS, I would be interested in talking about it with someone. I know Joe O'Donnell and Ellen Ceppetelli, and Greg Ogrinc and I have done some work in this area, but there is LOTs of innovation that could potentially take place if we did some education that included medicine, nursing, pharmacy, health policy, business. Anyway, just food for thought.

* Some schools are doing exciting things in the anatomy lab - for example using an interactive lab manual that is on table-side computer stations, or taking a CT scan of the cadavers before dissecting so they can learn how the three-dimensional relationships they see in the cadaver correlate with the two-dimensional image. I feel that our outdated facilities in the medical school limit our ability to use modern technology and be creative in our teaching.

* I am a part-time student at TDI and was forwarded your email last week regarding the activities of and student input to the DMS Strategic Planning Process. Unfortunately, last week was finals and I was completely engaged in studying (along with juggling the demands of my real job as CAO of a 40+ surgical group in Hartford, Ct.). Anyway, in response to your question looking for ways for DMS to, "be wildly creative and imaginative in medical education and research" Here are a few thoughts:

*Accept all qualified students for medical school but make clear that a defined weighting (say 10%) of the admission decision will be allocated to pre or post study outside their (the applicants) normal

environment, e.g.. year abroad, 6 months or more national or international volunteering, or - if you choose - lab research work. Equal credit to be given to scientific and non-science activities.

*Rank medical school applicants on "likelihood to succeed @ Dartmouth" based on a variety (TBD) characteristics after you establish a cut-off score for MCATS using the range (not the mean or median) for successful applicants (understanding in advance that this will broaden your applicant pool).
-Require that an applicant declare their intention to pursue (or not) primary care medicine after acceptance and offer an accelerated loan forgiveness program for medical school tuition for these who actually practice primary care for 4 years on a year-for-year reduction basis.
*Require all medical students to either get an MPH, MS from TDI or the Graduate school prior to graduating without extending the number of years of medical education.
*Approach medical education with a modified Great Books methodology like St. Johns College. That's it for now. Thanks for the opportunity to think outside the box.

*Medicine today is moving through a classical "Kuhnian" paradigm shift, from emphasis on clinical trials, where decisions are made on the basis of what happens to the "average" patient as determined in a well-studied patient population ("evidence-based medicine"), to decisions made on the basis of the abnormalities in each individual patient ("physiologically-based medicine"). The latter approach requires a thorough understanding of the disease mechanisms that operate in each patient, of each patient's responses to these mechanisms, and of therapeutic options.

*To meet the challenge posed by this new paradigm, which is expanding with unprecedented rapidity, the curriculum for medical education must be redesigned. Additional information about the molecular basis of disease and drug actions must be included, along with new approaches to facilitate the students' ability to understand and integrate disease mechanisms and therapy. One way to accomplish the latter would be for the core curriculum to feature "models" of disease that can serve as the basis for iterative analyses of mechanisms and therapeutic options, and anticipated (and unanticipated) clinical responses.

*I suggest that DMS assume a leadership role in equipping our medical students with the knowledge and skills needed to meet the challenges of individualized molecular medicine. A curriculum should be developed that will provide our students with an understanding of the molecular basis of disease and therapy, along with the skills needed to organize and apply this information to benefit each patient. The overarching goal should be to teach out students how to deliver individualized therapy tailored to the unique needs of the specific patients.

* More and more MDs are going to need to be certified to be proficient at performing certain tasks prior to being able to do them. As a former program director, you are facing the likelihood that your new trainees (hirees) are not certified to do the work for which you have hired them. From the trainees perspective, you have graduated with an MD that has probably put you deep in debt yet this does not allow you to touch a patient. It seems to me the last half year of medical school could be better spent (than now on electives, trips etc) on procuring these certifications in BCLS, ACLS, intubation and airway management, suturing wounds, tube thoracostomy and central line placement, foley placement, anoscopy and other such basic skills of patient care. Maybe this is another way of pointing out the failures of the first three years to teach, in a verifiable way, the basic skills of patient care in the present day.

*Reapportion medical student course time in some relation to diseases they will see or problems they will face. Why two hours of lectures about "Choreas"? Why six months in 4 years on neuro things?

*How about compensation for clinical years? Right now they are paying for 4 years and sending the money who are teaching them for 2. Shortening clinical rotations in the third year is pitiful. Georgetown has 16 weeks of surgery in the third and fourth years - their graduates actually have a clue about how to care for sick patients.

* Let's end tuition for all students, or students whose families make below a certain threshold (the College uses $75K), and replace loans with scholarships in the financial aid package so that we attract a student body even more capable of creativity, imagination, and innovation. They will, in turn, help attract/retain faculty interested in working with them.

* First, an unlimited budget would be most helpful!
*Second, training for employees in latest and greatest IT so we can keep up with the students, for pod casting, web meetings, ...
*Put DMS employees all together, rather than some on campus and some at Hitch so that regular brainiac and computer geek forums could happen without 1/2 of the people interested having to fight traffic, look for parking....

*It would appear that a number of our students are in no rush to get an MD and move on to practice medicine. The MD/MBA program is over subscribed and a number of students also take advantage of TDI. Should we take advantage of this and develop a five year innovative integrated program using the expertise of Tuck and TDI, but still keep it contained in the med school. As far as I can see TDI and Tuck are separate programs. We should look to attract students interested in health policy and research and not the traditional pre-meds.

*Since my forte is technology-based learning and instructional design, and my thoughts and research pertain to educational theory and philosophy, I'll plan on focusing on those during discussions to come. There are some publications on our website describing the Virtual Practicum model I developed while at Dartmouth, along with some other things that are relevant (http://iml.dartmouth.edu/education/pubs/index.html).
My current interests are in the use of games and simulations that are "annotated" by master practitioners/teachers, integrated into the overall (computer-based) educational experience. I'm also exploring the use of Massively Multiplayer Online (MMO) environments for collaborative learning, independent of physical location (could be anywhere in the world having an Internet connection).

*Another theme is the continuum for medical education that ranges from pre-professional through becoming a master teacher/practitioner, and how technology-based learning relates to that. (The latter part of the continuum would include training faculty/preceptors/mentors to teach, particularly using educational technology tools). Just some thoughts to get started.

*In the realm of medical education, DMS should first invest in the broad use of technology to support education. There are MANY innovative approaches that could be taken, but we are currently too far behind in the use of technology to support education to be able to innovate. Faculty with an interest in applying technology to improve their teaching are not adequately supported, so before being wildly innovative and ground breaking, we will need to build a better foundation.

*Think about offering some alternative medicine programs, this can be ground breaking.

*We should decentralize our activities by hiring very good, entrepreneurial people and resourcing them and those already here who seek to build interactive research programs. These are the people and the environment in which innovation occurs. Great ideas occur one at a time in one individual at a time.

*Identify and question basic assumptions.

*I have two ideas:

1--sponsor a contest (could be aimed at students/postdocs or PIs) and give an award to the most innovative research project (have entrants submit posters or abstracts). Could potentially have a symposium giving the winners an opportunity to present their data. Hearing/seeing the winning projects could potentially inspire others, or encourage collaborations, etc.
2--Same idea, but give out grant money (pilot projects) to students/postdocs/PIs to explore truly innovative ideas, requiring minimal preliminary data and encouraging collaboration. This is similar to the Prouty Pilot Project Grants through NCCC, but scope should be DMS-wide and not limited to cancer.

* 1) DMS would set out to demonstrate that, in the region that we serve, we can achieve a significant increase in lifespan and a significant reduction is health care cost with a program that would proactively council and educate the patient population relating to lifestyle and dietary factors that influence health. Such a program would include some level of lab work that helps patients focus on specific goals. While likely such a program would need to start with a limited trial, the MINDSET of educating the patient population and handing increased responsibility for wellness to patients, would need to be fully implemented in the medical school as well as at DHMC.

2) Relating to item number one, based on the current literature, an example of a simple intervention that could alter levels of disease in our region, would be to determine the levels of Vitamin D deficiency and inadequacy in our region and to actively treat this problem.

3) Teaching physical diagnosis would be more highly emphasized. It seems that as our older physicians retire, so many of the younger set depend so much on high tech machines and tests, that they no longer look at the tongue, touch the skin, exploit their sense of smell in diagnosis. Few except perhaps those in cardiology can discern the subtleties of the pulse. Physical diagnosis is an art that takes time and practice. We need to give our students and residents ample opportunities to develop and perfect these skills. This would improve their skills as physicians and may result to reduced health care costs.
Thanks for asking for our input.

* Bring back the nursing program. With competition fierce to enter a nursing program, revitalizing of this program would increase revenue while training staff for the future. A Nurse Practitioner program would be highly sought after from DMS.

*Figure out creative ways to train more family/primary care physicians and geriatricians.

*Look at how other schools have done this. It has taken multi-millions of dollars to build a new focused center in something or other (stem cells for example). It seems unlikely that anything of that caliber is going to happen at Dartmouth. Therefore, consider how to help innovation of existing programs and of each individual faculty member. Innovation in research is frequently stymied by the need to obtain

extramural funding, a process that can take several years if lucky. By then the innovation has gone. And even funded investigators need to protect their research portfolio that limits their ability to go off in new directions. Therefore we should develop an innovation fund to help develop novel ideas when they first arise. The incentive of such funds may help faculty to think about new directions. This will need a minimum of $50,000/year grants for several years, and possibly also faculty salary support (or relief that counts toward the fraction of their salary they need to raise according to their contract). For clinical investigators, this means ensuring they are relieved of clinic responsibilities.
Provide pilot funding to support innovative teams. A biological investigator may need a chemist or a clinician to advance the innovative idea, or vice versa. Create incentives for the members to participate. The same is true in research infrastructure. Dartmouth has rarely invested in new technology when it is first developed but waits until everyone else is doing it before we get into the game (for example, micro array technology for example which existed for 5 years before Dartmouth was able to buy its first instruments). And then the technology has to be affordable (we could never have afforded to do 100 micro array chips at $1000/each as other institutions did).
Bottom line: reduce the dependence on extramural funding for initiating innovative research.

*The greatest enemy of creativity in research is the difficulty in getting new/novel research projects funded. The Hitchcock Foundation already provides a mechanism for providing seed money, but it is not enough to really get something off the ground ($15-30k total for one year). By comparison, the Cystic Fibrosis Foundation Research & Development Program pilot grants are on the order of $40-80k/year for two years. Perhaps an institutional commitment to support larger Hitchcock (or CTSA) pilot grants would spur people to take a chance on a new idea.

*Here is my response to your question about being "wildly creative". We have just shown that reduction of body iron stores results in reduced risk of developing cancer (JNCI paper enclosed) and an age-related reduction in all cause mortality and death plus non-fatal myocardial infarction and stroke (you have to read the results section of the JAMA paper enclosed to get the message). The mechanism is reduction in iron-catalyzed oxygen free radical formation which leads to diseases of oxidative stress including cancer, vascular disease and other diseases of aging. The monumental implications for low/no cost population-based disease prevention are described in the papers and on our web site (www.cancer.dartmouth.edu/iron.)
Seems to me this should be worth considering. If DHMC doesn't take the next step, someone else will. There are lots of simple things to do next. Please pass on to whomever might be interested.

* Medical education outcomes research. Study and establish links between education and outcomes, not just in terms of test scores but relative to attitudes and values - the things that should separate DMS physicians from others.

*we need to look at the model at Tuck and Thayer where they encourage innovation, share the riches with the investigators and then the inventors share the rewards with the institution - this works at Thayer and Tuck but unfortunately is a more long term solution to the short term crisis

Question #4: September 22, 2008

One of our subcommittees is focusing on how we take care of people--faculty, students, staff, and alumni--here at DMS. We want to strive for the best in this arena and to make one of the hallmarks of the school be an environment that supports people and help them thrive and do excellent, meaningful, and important work. What suggestions do you have to create this type of environment? Suggest anything (note faculty research support came up via the last question), but we suggest thinking of most-bang-for-the-buck little things that would make life here better."

*Barb and Dick Couch of Hypertherm have created this type of environment for their employees... it might be helpful to talk to them. Contact Len Caldwalter, Vital Communities, to see what community programs are already available.

*DMS could look more comprehensively at what makes employees lives better. Could we have showers and locker rooms so that getting exercise is easier? An on-site gym? Many studies have shown that this reduces health care costs to the institution. Or what about more after school programs for kids? That sort of thing.

*Even more seriously, there is no promotion path if you are not full fledged tenure track faculty. I have been a research associate for 15 years, with increasing responsibility and expertise, presentations at national meeting, teaching, etc, but I have no where to go within the institution.

* Most programs at DMS (and Dartmouth) are geared towards Faculty and Students, as they should be. That is how we recruit and maintain great faculty and students! But your question above also includes "staff" and I have some ideas for that group.

*DMS has many programs geared towards faculty and student incentive/recognition/merit but none for staff. Other than internal thanks within your own org for doing a great job, there are no notices that recognize someone who has done something special, no incentive salary augmentation programs to work towards, no merit increases to strive for. Incentive payments and increases are not consistently known or given. Not that these programs are necessary, but as we all know, the spirit of competition and striving for a "goal" can sometimes do wonders for increased productivity and job satisfaction.
I've been at Dartmouth most of my working career, as you know. However, I did take a 5 year hiatus(!) and worked on a project for another major university in the northeast. Some of the programs that they had for their staff were absolutely wonderful. Here are some examples:

*Annual increases - these were based on an average cost of living for everyone and then a competitive "merit" increase pool. Each staff member was "expected" to change their job (for the better) by 10% from the previous year to make the "minimum". Anything above that went towards your merit increase. You met regularly with your supervisor to discuss goals and milestones. This brought your supervisor into the spirit of actually helping you to reach your goals. It made you feel as if someone really cared about you!
-Promotions - all promotions were highly publicized for staff. An incentive was always given when you "bettered yourself"! It made you work harder to do move up and do better! This is not consistently done or encouraged here at Dartmouth.
-Peer-to-peer - employees (faculty & staff) were asked to nominate another employee for a peer-to-peer award. These awards were to recognize someone who went out of their way to help/aid/teach/share with... another faculty/staff/student (with work, to reach a goal, for witnessing a

kindness to another, etc.). There was a committee that met quarterly to discuss the nominations and handed out awards. Awards were many things - depending on the deed ($'s, local dinner gift certificates for 2, t-shirts).
-Dept/Org incentives - each year the Directors/Dept Chairs would encourage their employees to "rock their organization". You could work in teams or as individuals. The basic program was to come up with new ideas that would somehow make a significant impact on the university. If the program/idea was accepted and put into practice, that team or person would receive a salary augmentation (since higher education doesn't give a bonus!). Ideas ranged from ways to streamline processes, improvements to customer service, financial saving ideas, how to do more with less, etc. These ideas could be for your org or another org. My Director was a real go-getter. He would solicit ideas from his staff (80+) monthly and then we would volunteer to work on the ideas. He would give us each so many hours weekly to work together on these projects. We won things quite regularly! These were monthly awards so many times there were many committees working at the same time. And we had a lot of fun doing these things. Sometimes we recruited students or faculty to help us, if we needed that focus of input. Over the course of many project, I met lots of new people that I never would have met otherwise.
-There were several other programs, these are just the ones coming to mind as I write. Some programs were tried, modified, tried again, thrown out and new ones developed. The best part is that we were all part of these and wanted to participate. It was not ever required - and there were people who did not want to do anything other than the job they were hired to do. That was fine also and no one was shamed if that was their choice.
-All programs listed in the paragraphs above were highly publicized and recognized. Employees wanted to do better - it made them feel great about being part of the ideas and solutions to make changes for the better - not just be a worker-bee. Annually, the President would do something special for the org who had successfully had the most awards presented to their employees (pizza parties, cookouts, t-shirts, small but very meaningful). People who never would have had a chance to meet with the President felt very special to be honored in that way.
-One more thing, the committees that judged winners, so to say, were from all levels and many different orgs. People made a commitment to stay on the committee for at least two years but then rotated off to give others a chance to partake.
-I'm sorry if this is long winded - and if there are typo's mixed in - I'm trying to do this quickly as I head out the door. I hope this is what your committee was looking for. I thank you for asking "all of us" to participate. Please let me know if you have any questions.

* I've continued to think about this and also attended the Pfefferkorn symposium today--so inspiring--and want to add to my previous responses....

-Why not ask each faculty member what they feel most equipped to teach. Imagine a moment soon after someone arrives here when a person in a leadership role (Dean or designee, Chair, Dean of Faculty, Chief Academic Officer, ...who knows) would sit down with the new faculty member and confirm that being a teacher is part of the job, that each person is asked to consider what form that should take...For instance, do you see yourself teaching technical skills, communication skills, compassion, basic science, research methods, etc. do you see yourself teaching in small groups, large lectures, in clinic? do you see your primary teaching audience as residents, med students, undergrads, PhDs, colleagues, community, patients, etc? What if we lived in a world where I could actually choose to teach in a venue that suited me and what I had to offer? Or even one where we could have these kinds of conversations? okay--I realize I need to curtail my fantasy life...

* Here are some thoughts on creating an environment that supports people and help them thrive and do excellent, meaningful, and important work. The overall list which I generated from conversations with staff at DMS is far too long to send so I narrowed down the themes to a manageable form.
-Let's keep in mind that one of our goals should be to help create LOYAL contributors to the institution - how to do that? We should be showing "we" care through a variety of avenues.

-All of our student (MD, PhD, TDI) voices are important and should be acknowledged in a respectful way; they are our future alums and the lifeblood for our continued prosperity and success.
-Regularly revisit the thoughtful DMS goals dated 3/21/08 and provide a status report on each one particularly #1 & #7. Strive to coalesce the administrative offices within the Administration through meaningful communications and interactions
-Include "supporting customers" in the DMS mission statement, that is, those individuals who support our primary customers (e.g., students, alums, patients, community, etc.) Another words, take care of the people who take care of our customers.
-Catch employees doing something right and coach when results aren't what you expected - strive to bring out the star quality in your staff (e.g., set goals, provide training, conduct annual performance evaluations, etc.).
-Practice basic common courtesy, treat others as you want to be treated; e.g., say "Thank You".
-Addressing unprofessional behavior/misconduct in a timely way will help to maintain the integrity of the profession, DMS and our professional code of conduct, as well as boost employee morale.
-Since our DMS community is relatively small, many individuals here develop positive relationships over the years; communication regarding staff changes is important (Who is coming and going?).
-Implement a reward system for noteworthy staff performance such as: an employee appreciation event in warm weather; designated parking near building for employee of the week, on campus lunch voucher ($5), certificate of appreciation signed by your chair and dean of DMS, create a staff lounge especially for during the long, cold winter months where people can get away from their desks will help build community, give out T shirts (labeled something like: DMS #1 Team Player), etc.
-Conduct spontaneous staff spirit boosters and community building activities such as: show a monthly film at lunchtime (in the library) brown bag series to enrich the staff, and an ice cream social, etc.

*I think the issue is engagement in the community of DMS. It is very easy to be disengaged, especially since we all have too much to do. Creating a culture of engagement would improve the environment of work. It would be a chance to step out of your routines but also to do something of value. For example, the medical school has societies, but the average faculty member knows little about them. They could be a mechanism to bring faculty and students together. I am thinking of a series of one time task forces that are asked to address a meaningful question - sort of ad hoc advisories to the dean made up of 8-12 faculty/students and staff, perhaps over lunch. Each one would address a question of interest to the dean - a short written report. The goal would be to expand the pool of thinkers, increase meaningful interactions and get some new perspectives. It could be an ongoing quality improvement project wherein each faculty member and student and staff member could expect to be invited in once or twice a year. The dean would have to make it clear that participation was an expectation.

* Here are a few smallish ideas that might create a more collegial culture, and connect the clinicians with their academic roots:

-Pay for academic garb for all faculty (i.e. those at DHMC) as a way of encouraging participation in graduation. Then, actually invite them to be a part of the occasion.

-Invite faculty to be part of other medical school events, like White coat ceremony and any other transitions, orientation picnics, and other things.
-Extend the Societies so that they connect with the clinical faculty--assign each faculty person to be part of a society. Have society events at DHMC (heart rounds in some of the open spaces in the new Doctors Building). Invite Society members to be involved at DMS society events. If possible, give each society a room or a gathering area at DHMC and at DMS where people can go to chat, eat lunch, study, etc. Think about organizing the residents into the societies also, so that common identities emerge, people are connected to the history of DMS, and to each other and to former and future members of the same society. (Maybe we need to get a Sorting Hat!!...)
-If not through societies, organize regular social events that bring faculty together informally to share.
-Reinstate a doctors' dining room.
-Fund a program that encourages students or residents to invite a faculty member to lunch or dinner. (The college has one of these).
-Develop a system in which there is an expectation/requirement that each faculty member will select at least one "teaching opportunity" a year that is part of "service" and not expected to be "made up for" (i.e. RVUs). These opportunities would include being a facilitator or preceptor in On Doctoring, facilitating a small group in PBL, HSP, or other courses, doing a block of attending rounds with Medicine (currently not structured that way), and other things like that (especially focusing on the things that are currently difficult to recruit for).
-Create a system that guarantees that each student and each resident has a faculty "coach" who meets with him or her regularly to "check in" on stress, career development, life, etc. Consider a similar coaching assignment for junior faculty to connect them to senior faculty. These relationships would not need to be within specialties, but a senior surgeon could be paired with a junior rheumatologist--the idea would be to create community and break down silos.

* The DHMC campus needs tennis courts, basketball and probably a track. Done properly, you might be able to use the same space for ice skating in the winter.

*Have non-structured informal meetings to facilitate faculty and student relationship development. A great example of this is the coffee hour in Borwell. An institution wide policy with something like this, perhaps once a month, could bring about mentorship's, collaborations and lasting relationships, and could easily be alternately sponsored by different departments.

*Daycare centers at the hospital and medical school. Having affordable on-site childcare is healthy for family dynamics as well as for the workplace. It reduces absenteeism and turnover improves morale and is a major decision affecting factor for working families with children. Having on-site child care makes balancing family/work easier- a concern in students and families who are at DMS. Additionally financially, this can be profitable for the institution even if employee sponsored (see "Kids at Work: The Value of Employer-Sponsored On-Site Child Care Centers," published by the W.E. Upjohn Institute for Employment Research in 2004 by Rachel Connelly).

* I would like to see a formal mentoring program of junior faculty by senior folks with a focus on supporting individuals in their career development and progress towards academic program. It is important that new/junior faculty feel that the institution wants to foster their academic careers beyond the narrow realms of clinical service and core teaching activities.

* I'm surprised that no junior faculty are included on the committees to represent a younger generation.

*Patients should also be represented (lay people) if we are to commit to pursuit of effectiveness in our care.
*A key question should also be to consider what would lure someone away from a place like Boston. There some environmental challenges that we face in recruiting talented people to the Upper Valley (for residency or faculty positions).
*A basic one is daycare. We waited a year to be accepted to DHMC daycare, then it was too late... We were already committed to a place that required 30 days advance notice of a change. My wife works in Dermatology and delayed her completion because we could not get enough daycare coverage. I also had to make special arrangements in order to fill in the gaps in daycare. Now our daycare is falling apart and many parents have pulled out following an exodus of employees.
*Speaking for Generation X, I think family balance is a massive priority. The prior generation may have pursued a different balance in work-life.
*That seems like an easy selling point for attraction of talent... Promise to support families to allow faculty the support and reassurance to achieve focus and creativity. It fosters loyalty as well.

*When I was growing up and my dad was a professor of Anatomy at Penn medical school, faculty (and probably administrators) were always strongly encouraged to invite students to their homes for a meal. The students were allocated by the deanery to those faculty who responded, so all student names were covered.
Interestingly, several of these students kept in touch with my folks, and became lasting friends (in fact I re-met one who graduated around 1960 a couple of weeks ago at my brother's 50th anniversary party!). I think it has been assumed --left over from the good old days when all faculty and students lived in Hanover--that at Dartmouth such invitations will happen of their own accord, but I am not sure this is the case. Perhaps this has been happening and I just was not being asked to host, so correct me if I'm wrong. A different way to do this is to encourage students to invite faculty, and subsidize the meal--however, that means the shy or retiring students will not get the faculty contact. Of course there are the big events at which a huge crowd of students and large group of faculty picnic, or whatever--but it is hard to get very far beyond pleasantries in such a setting. Just a thought.
-Also, a comment on the idea of having all students get the MPH or MS, why not take some of the essential courses from the Institute and insert into the DMS curriculum? Quality improvement and decision-making spring to mind, and of course you'd like all to do epi/stats.

* Increase the amount of office space available so that ALL faculty can have a private office.
-Get the cooperation of dietary to post allergens (not just the list of major contents) in foods offered in the cafe and cafeteria.
-Get dietary to make at least one HOT entree (or soup) for each meal of each day that is healthy and free of the major allergens (wheat, gluten, soy, nuts and milk). People who work here on a long term basis and who have food sensitivities can only get a balanced diet if they bring the majority of their own food to work with them. You simply cannot eat from the salad bar every day.

**I think the issue is engagement in the community of DMS. It is very easy to be disengaged, especially since we all have too much to do. Creating a culture of engagement would improve the environment of work. It would be a chance to step out of your routines but also to do something of value. For example, the medical school has societies, but the average faculty member knows little about them. They could be a mechanism to bring faculty and students together. I am thinking of a series of one time task forces that are asked to address a meaningful question - sort of ad hoc advisories to the dean made up of 8-12 faculty/students and staff, perhaps over lunch. Each one would address a question of interest to the dean - a short written report. The goal would be to expand the pool of thinkers, increase meaningful

interactions and get some new perspectives. It could be an ongoing quality improvement project wherein each faculty member and student and staff member could expect to be invited in once or twice a year. The dean would have to make it clear that participation was an expectation

*****In response, we heard things like (in no particular order),
* Learn from other organizations (like Hypertherm) that are known for nurturing their people.
* Look comprehensively at what makes employees lives better. Could we have showers and locker rooms so that getting exercise is easier? An on-site gym? More after school programs for kids?
* Promotion paths if you are not tenure-track faculty.
* Most programs at DMS (and Dartmouth) are geared towards Faculty and Students, as they should be. For "staff," consider incentive/recognition/merit programs, annual increases linked to performance in combination with strong and effective employee-supervisor partnerships. Make promotions visible. Formalize peer recognition. Create incentives for units to excel and innovate.
* I've continued to think about this and also attended the Pfefferkorn Symposium today--so inspiring--and want to add to my previous responses....
* Encourage, support, and "equip" faculty to teach.
* Respect all parts of the communities: all students (MD, PhD, TDI, other), coalesce the administrative offices within the school through meaningful communications and interactions, make "supporting customers" a priority, recognize employees doing the right things and coach them when they're not, and practice basic common courtesy--treating others as you would want to be treated.
* The issue is engagement in the community of DMS. Creating a culture of engagement would improve the environment of work.
* Create a more collegial culture, and connect the clinicians with their academic roots: support the participation of all faculty (i.e., those at DHMC) in Class Day and our other academic events. Extend the societies so that they connect with the clinical faculty. f not through societies, organize regular social events that bring faculty together informally to share.
* Develop a system in which there is an expectation/requirement that each faculty member will select at least one "teaching opportunity" a year that is part of "service" and not expected to be "made up for" (i.e., RVUs). These opportunities could include being a facilitator or preceptor in On Doctoring; facilitating a small group in PBL, HSP, or other courses, doing a block of attending rounds with Medicine; etc.
* Learner mentoring: create a system that guarantees that each student and each resident--and junior faculty member--has a faculty "coach" who meets with him or her regularly to "check in" on stress, career development, life, etc.
* The DHMC campus needs tennis courts, basketball courts, and probably a track.
* Have non-structured informal meetings to facilitate faculty and student relationship development. A great example of this is the coffee hour in

Borwell. An institution-wide policy with something like this, perhaps once a month, could bring about mentoring, collaborations and lasting relationships, and could easily be alternately sponsored by different departments.
* Daycare centers at the hospital and medical school. Support families and work-life balance.
* I would like to see a formal mentoring program of junior faculty by senior folks with a focus on supporting individuals in their career development and progress towards academic program.
There some environmental challenges that we face in recruiting talented people to the Upper Valley (for residency or faculty positions).
* Increase the amount of office space available so that ALL faculty can have a private office.

*****Equip medical students with the knowledge and skills needed to meet the challenges of individualized molecular medicine. Develop a curriculum that will provide our students with an understanding of the molecular basis of disease and therapy, along with the skills needed to organize and apply this information to benefit each patient.

* I thought I might respond to last weeks question about how to take care of faculty staff students...

I think moral is one of our major issues and that the maxim "a happy employee is a productive employee" has been proven time and time again. Some of the large and innovative tech firms in CA that are looking for innovation and productivity have lead the way by bringing fun stuff an amenities to the work place. They found the cost was worth it and that the productivity improved so much that it clearly made up for it. We also have
recruitment and retention issues so these types of things might help.

Some of the things that could be done:
A gym that is good and not in the basement with real locker rooms and showers...
A track.
Tennis courts.
Basket ball courts.
Playing field.
Outdoor amphitheater/stage (better than what town greens have)
Free coffee (good stuff - espresso) and snacks and drinks for the whole work/learning force (big bang or the buck here).
A faculty club (like every other university on the planet).
Outdoor obstacle course.
Exercise points on the trails.
More trails.
Team sports with intersection/department leagues...
More art displays (faculty/staff and outside artist. Why not be a gallery (even get the commission from sales).
Climbing wall.

Department Tee shirts and medical center merchandise for staff. Give every new employee a ball cap and a tee shirt with the logos and emblems...
Make the benefits better than other universities (this would be an expensive one since we are fairly far behind)
Include gym membership on the main campus for faculty and students.
Put the lounges where people would sit and eat on the high floors by the windows with good views.
More on site activities, yoga, lectures, old movie night, performances...
Sponsor teams to play against the community.
A running club.
Groomed cross country trails in winter. Snow shoe trails with snow shoes to loan.
On the trails add good naturalist stuff with signs and information from the Montshire kids type level up to adult level. Add bird hides in good locations. Maybe even get Montshire to help.
On site daycare that is included and not the most expensive in the area (that would be a great benefit).
How about animal daycare like The Ranch.
Airport shuttle for business trips.
Make a totally covered, enclosed and heated walkway with a bridge over the loop road from Lot 20 since it is really cold, snowy, and blowy for a good part of the year.
Build 8 more parking towers that are connected and let employees park in them. Plant trees in the distant lots.

Then a separate issue that could create a team atmosphere particularly since we are one of the biggest tree hugging crunchy doctors groups around is make the campus "greener" in a visible high profile kind of way. Maybe be the "greenest" hospital in the country. New building should all be LEED Platinum level. Old stuff should be retrofitted. The roof should be turned to solar PV panels. We sold consider industrial size windmills. We should try to make all our own power. We should look at the automotive world and look at how they cut down on packaging and waste. Buy from manufacturers who package minimally or give them incentive to do so. Send packaging back for reuse. More timed and motion detecting switches. More careful medical supply purchasing with less waste in mind. Increase the recycling program. Improve mass transit to the medical center. Consider something as splashy as a monorail from Hanover and Norwich with parking lots by the interstate (cuts traffic too) and have it go to our distant parking lots as well. The East Mall could become the station (maybe up on level 5). It would put us on the map. Count and monitor and display all of our power, water, and product consumption with conservation goals posted. Force people to recycle more.

This is just stream of thought. I have not really made myself think about this in an organized way yet.

*I've continued to think about this and also attended the Pfefferkorn symposium today--so inspiring--and want to add to my previous responses....

Why not ask each faculty member what they feel most equipped to teach. Imagine a moment soon after someone arrives here when a person in a leadership role (Dean or designee, Chair, Dean of Faculty, Chief Academic Officer, ...who knows) would sit down with the new faculty member and confirm that being a teacher is part of the job, that each person is asked to consider what form that should take...For

instance, do you see yourself teaching technical skills, communication skills, compassion, basic science, research methods, etc. do you see yourself teaching in small groups, large lectures, in clinic? do you see your primary teaching audience as residents, med students, undergrads, PhDs, colleagues, community, patients, etc? What if we lived in a world where I could actually choose to teach in a venue that suited me and what I had to offer? Or even one where we could have these kinds of conversations?

Okay--I realize I need to curtail my fantasy life.

*Here are some thoughts on creating an environment that supports people and help them thrive and do excellent, meaningful, and important work. The overall list which I generated from conversations with staff at DMS is far too long to send so I narrowed down the themes to a manageable form.

Let's keep in mind that one of our goals should be to help create LOYAL contributors to the institution - how to do that? We should be showing "we" care through a variety of avenues.

*All of our student (MD, PhD, TDI) voices are important and should be acknowledged in a respectful way; they are our future alums and the lifeblood for our continued prosperity and success.
*Regularly revisit the thoughtful DMS goals dated 3/21/08 and provide a status report on each one particularly #1 & #7. Strive to coalesce the administrative offices within the Administration through meaningful communications and interactions
*Include "supporting customers" in the DMS mission statement, that is, those individuals who support our primary customers (e.g., students, alums, patients, community, etc.) Another words, take care of the people who take care of our customers.
*Catch employees doing something right and coach when results aren't what you expected - strive to bring out the star quality in your staff (e.g., set goals, provide training, conduct annual performance evaluations, etc.)
*Practice basic common courtesy, treat others as you want to be treated; e.g., say "Thank You"
*Addressing unprofessional behavior/misconduct in a timely way will help to maintain the integrity of the profession, DMS and our professional code of conduct, as well as boost employee morale
*Since our DMS community is relatively small, many individuals here develop positive relationships over the years; communication regarding staff changes is important (Who is coming and going?)
*Implement a reward system for noteworthy staff performance such as: an employee appreciation event in warm weather; designated parking near building for employee of the week, on campus lunch voucher ($5), certificate of appreciation signed by your chair and dean of DMS, create a staff lounge especially for during the long, cold winter months where people can get away from their desks will help build community, give out T shirts (labeled something like: DMS #1 Team Player), etc.
*Conduct spontaneous staff spirit boosters and community building activities such as: show a monthly film at lunchtime (in the library) brown bag series to enrich the staff, and an ice cream social, etc.

Question #5: October 6 2008

"The financial markets are stressed. NIH and other funding are tightening. These are tough times. Any thoughts on how DMS can survive these times and even thrive in them? What can DMS do to strengthen its financial stability?"

*having an aggressive tech transfer department that seeks out and supports patentable inventions and then defends the patent would be a good thing to develop. the current tech transfer office is not aggressive and penny wise but pound foolish in my view

*we cannot deliver quality service without quality support. Our dept. continues to cut support, add administrators (non-supporting), and lose faculty. May be a good tactic to make financial statements appear strong, but undermines our ability to deliver quality service. Quality service will always sell itself. Second, to help address the larger financial situation, we should be far more politically proactive working at state and federal levels to make health insurance meaningful - not just "affordable." Insurance without providers is useless.

* I think my suggestion may address, to some extent, the last two questions.

I think it's important right now to reassure faculty and staff, so that insecurity and uncertainty don't create a climate where folks are feeling they must start looking for a new job. There is some "Should we abandon ship because of DMS' financial difficulties?" conversation out there. I'm sure you know.

*Unfortunately if appears that due to the increase in the interest on bonds to non profits that any new building construction that has not presently been begun should be temporarily at least put on hold until the bond markets adjust

*Other universities use financial incentives to motivate faculty to submit more grants. When I was at Vanderbilt my department offered a $5,000 raise for every new R01 we were awarded (up to a total of 3). I think this only applied to junior faculty. However, I think it made a difference. I think Dartmouth should explore incentives like this as a way to motivate faculty to submit more grants.

*There are two sides to the financial picture, which at DMS (unlike most for-profit organizations) can largely be considered separately: revenue and expenses.

First, revenue:
The NIH is, and for the foreseeable future will remain, the major source of funds for DMS. Attraction and retention of the best minds will produce the best, most fundable ideas. Of course this deserves its own comprehensive strategy as the quality of the Faculty impacts all other aspects of our efforts. But we must also be world-class in our *processes* for accessing the NIH, i.e. benchmark, measure, and manage. There are a few isolated efforts to improve our submission processes (e.g. instituting peer review), but they are limited to experiments in individual departments.

Beyond the NIH, and as I mentioned in my last email re: innovation, we are an organization with two products: trained students, and intellectual property. DMS is a $137M R&D engine without a commercial front-end. A mere two professionals staff a TTO that is responsible for the College and all three professional schools. A comparable R&D budget in industry would be expected to generate well

over $1B in revenues. Of course not all of our work is commercially relevant, nor can we expect the same returns as a commercial enterprise, but the gap between current performance and our potential is staggering.

Second, expenses:
Without question, the biggest opportunity for cost reduction is found by looking at Dartmouth holistically. The extent of duplication of staff between each school and the College is amazing to an outsider. Even if we decide to keep all the people, at least integrate the offices, share information, and remove the enormous duplication of effort (actually, with four pseudo-entities, I suppose the correct term is "quadriplication"...). If leadership is unwilling or unable to make this happen, then give the Schools independence. Decide whether we are one organization or four. Right now we've got the worst of both worlds, which happens to be very expensive, and produces few tangible benefits.

*Thanks for your leadership in this planning process.. Your question is timely of course, given the recent events in the financial markets. Like other academic medical institutions, we depend on three primary sources of funding: tuition, research funding, and endowment. It would seem that the first two sources are the most promising paths to focus on, at least in the short term. Particularly in the area of education, it would seem that we are well positioned to grow our base given the ever increasing demand for medical services. This demand will not diminish in a financial crisis. We should think creatively about expanding our programs in new directions that take full advantage of our faculty and institutional resources. Of course, the MD program will always have a leading and hopefully expanding role, but other health professions are certainly needing our educational services. Furthermore, graduate education in biomedical sciences has great potential. For instance, we are proposing new training programs in Biostatistics and the Quantitative Biomedical Sciences that could generate significant income and better support our research mission as well.

As far as biomedical research goes, I think we will be entering into an improved funding climate, given the recession-proof nature of federal support for this program. Will the government cut these valuable programs knowing that this will have a negative impact on the overall health of the economy? Not likely..Even in the area of endowment, we are in a time of opportunity, as there exist real bargains now for equity for institutions that can afford long term investments.

So, in summary, these do appear to be both the worst and best of times for DMS, and I for one think the future is bright.

*Financial stability requires consideration of current, near future and long term solutions. The following may help.

In the current climate of lower interest rates, DHMC should immediately attempt to renegotiate any current debt obligations to lock in the lowest rates possible. Review access to capital that may be needed for ongoing operations and growth. Secure new sources if necessary.

With respect to long term considerations, invest in and implement services and protocols that will improve outcomes. As long as DHMC has some of the best outcomes in the nation, we will continue to be a magnet for patient referrals. A great reputation will bring in new patients by word of mouth.

To secure mid and longer term increases in income and use of DHMC facilities, create a number of consumer oriented "Wellness Packages". A Wellness Package would be purchased by a consumer or

their employer to provide a specific package of wellness services to the individual. These would typically be services not covered by an individuals' insurance. The concept is to capture a sector of the wellness market, keep costs affordable for the specific market sector that is targeted and provide a source of patients who would be referred to specialists, if a need were present.

The wellness packages would be tailored both financially and need wise to a specific group. For example, a Wellness Package for people on Medicare would include an annual physical exam and specific lab tests that would not be covered by Medicare. This package might also include a flu shot, group nutritional counseling, and group exercise training. Physicals could be done by PAs or RNs to keep costs lower. Increases in volume of labwork should provide additional profits from that profit center. Some wellness packages for which there may be a market include:
Uninsured Individual
Uninsured Family
Pregnancy Related
Athletic Wellness
Middle Age Wellness
Medicare Wellness Basics
Optimized Geriatric Health

*I would love to see a top-down initiative for all of us to recognize the problem, own it and work together to solve it (or at the very least, ease it some). But we ALL have to all be held to the same standards. We all need to be treated with the same level of respect to understand the problem and to find ways to work as a group to make this happen. We all need to feel okay to question something if we think it is excessive spending. We need to hear what is working for some and help each other to do the same.

Break the issues apart by groups and get a cross representation (faculty, staff & maybe students) to work on ideas immediately. Set the group meetings the same time for all (example 10-12 the 1st & 3rd Monday or each month). If folks want to be part of these groups, then they have to find the time to participate. Do it during normal business hours so all (hourly paid especially) can participate and it will be paid as part of their "normal" duties. Get volunteers then draw participants out of a hat (if you get too many)

Gift/Endowments
Revenue
Building charges (construction, renovation, utilities)
Personnel
Travel & Entertainment
Supplies & Equipment

At a quick glance, I think these are most of the big ones. Charge the groups to find creative ways to reduce costs and increase revenues in each area (if possible). Off the top of my head as I write this, I can think of a few ideas for each category:

Gift/Endowment - set up an "employee" gift/funding program. If I had a tax deductible (auto payroll deduction) to donate towards a "gift" that was going to be used for something really special, I'd do it. We're never asked. We were for the donations for when the new hospital was built, but we haven't

been asked since. It would help us feel "part" of something special! Put a plaque on whatever is built saying "this was raised by the generous donations of DMS employees been 1/1/09 and 12/31/10".

Revenue - John Kafaro (not sure if the spelling") use to work for OSP. He could pull funding availability out of thin air for you! I once asked him about possible funding options to buy a "used" fire truck for the volunteer fire dept in a community for a friend of mine. He had an answer in 2 minutes. OSP should be gathering this type of information and going door to door to give these ideas out. They should have "writers" available to help first time grant submitters.

Building charges - why do our facilities cost what they do? Do we really need our lawn mowed weekly - wouldn't every 10-14 days be okay also? Do we need to paint a whole office to fix a chair scrape? Why does it cost us 2 men & a truck to hang a corkboard up? Why do are some offices very plush when some have pipes leaking? Could FO&M charges be centralized and "requests" for work be put into daily committee decisions for "yes", "no", "future"? If FO&M gives you a quote for $1,000 but charges you $1,500, why can't you dispute it?

Personnel - About 6-7 years ago, DMS Fiscal was working on a plan to look at all Administrative positions and the people in them. We wanted to figure out many things:

1. Are the people in current positions trained to do their job. If not, are they in the wrong job or how do we help them get the training they need.
2. Is the work equal per person, per dept.
3. Are positions/salaries equal per person, per dept.
4. How can we help folks set 1/3/5/10 year goals, and help them achieve the training needed to reach those goals. (Better employee retention)
5. What processes can be centralized to aid more depts. (Conference/Event planning? hiring/payroll processes? Procurement of goods/services?)

Travel & Entertainment -

1. Travel - preapproved trip & expense charges, is the trip necessary, what is to be gained by going, how does it benefit DMS? Can we reduce the number of people who go to the same conference by rotating annually who attends? Can a few attend and put together briefings for all when they return? Hotel standards (Holiday Inn vs Waldorf), set meal maximums or so much per day and be firm. For Higher Ed, travel should not be looked at as a "perk". It should only be done as a necessity. If it can be done locally, it should be.
2. Entertainment/meals/food at meetings: preapproval. Lots of questions should be asked in this area. Does food have to be served? If attendance is significantly lower if no food is served, then question the event. Can this information be given out a different way? Can attendance be strongly suggested for attendance? Can it be brown bag - with dessert supplied? Does the event have to be catered or is pizza/salad or sandwiches just as good. Can we set meal $ standards for meetings/luncheons/dinners (per person). Can we negotiate with local vendors to meet these standards to help reduce costs (no pickle, no paper goods - we'll buy in bulk)?

Holiday/Summer events - why do so many depts need to have a holiday party and a summer gathering? (Some have neither!) What if many depts combined forces and did a once a year "spring fling" or "fall festival". Prices are reduced during those months and more people could attend. Do spouses need to be invited? Figure out what the intent of these are - is it to "reward" employees? meet socially? Can we be more personal - ask folks to make/share foods? Remember our holiday potlucks?!! People came because they wanted to, it was fun and attendance was not expected! It grew from 10 to over 80 in 3

years because people wanted to share what they made! We spent about $400 centrally for the cost of drinks, paper products, condiments & a cookbook! That's a pretty good return for 2 hours of good food/good friends/good celebration.

Supplies & Equipment - No one can recognize "excessive spending" in this (and travel) like the person at the bottom of the totem pole who is doing account justification. Ask them. I talked Procurement Services into doing a "supplies swap" a few years back. We hand folks clean out their closets for post its, pens, notebooks, rulers, etc that have been sitting around a not being used. PS picked them up for us and put all at Alumni Hall. The next day, you could go over and shop (for free). It was like a big yard sale at no cost. We should do this both here and at the DHMC campus WITH DHMC. It was great.

Another thought - give incentives to depts who reduce their "travel, entertainment, supplies, equipment" costs by over a certain % from budget. Carrot & stick!!

*I do have a number of suggestions, however this important question requires a thoughtful and complex response.
Do you folks really take our suggestions seriously? I don't mind putting in the time to reply, but I want to make certain that the investment of my time is meaningful.

1) Heavily solicit private funding from individual donations
2) Diversify its grant applications to include other funding sources such as pharmaceutical companies, Dept. of Defense, Johnson & Johnson, etc...
3) Strongly encourage its students to apply for training grants and other types of funding.

Thanks for soliciting our opinions

Question #6: October 20, 2008

A number of enterprises--for-profits and not-for-profits, governmental, research teams--right now use collaboration webs to enable their work, build community, and get things done in a distributed, networked environment. Is this something that DMS is ready to do? What would be the content, participation, and deliverables that would make such a web site successful and supportive of your work? The challenges actually aren't technical, but rather are cultural and organizational.

The input we got was generally supportive, although people have information overload and urge caution that this collaboration web not be just another thing to monitor, that there be substantive application for it integrated in our work.

*This is probably getting a bit tough to believe, but I've also had intimate involvement with the evaluation and implementation of these types of technologies in a corporate environment. Key to success is getting goals right. "Enable their work" is a bit opaque for me - we all do our work today, so enablement isn't quite correct. "Build community" is very dangerous. Community is built face-to-face. There's a lot of research on this. You can argue that the "next generation" might be different, but we codgers still build relationships best in person. Many of these tools allow people to feel as if they're engaged while they actually keep them at their keyboard rather than at the water cooler.

This is a great example of a very attractive set of technologies that have failed repeatedly in the market. If the goal is data and information sharing between focused teams with shared purpose, it can work. If the goal is archival and retrieval in nature, it can work. Anything beyond that I've not seen, even second hand. Etienne Wenger and especially Richard McDermott were very helpful to me - provided case studies, shared their own life's experience (communities of practice focused, but probably what you're looking to develop here). If I had to synthesize my experiences, I'd say that the problem needs to be approached without technology in mind. Realize that in an organization like DMS, you have no leverage to change behaviors, and changing behaviors is the only task that needs to be accomplished. Be explicit in what it is you're trying to accomplish, then look at how *people* would do it. If you find a gap, fill it with technology when nothing else will do. Shell Oil did this well with a technology solution, but they've got 2000 engineers with similar backgrounds, training, and shared purpose... scattered across the globe. Plus
they're engineers. We have a different problem, if we indeed have a problem at all. Final thought - whatever you do, do it at a small representative (not "true-believer" pilot scale first). FYI - I ended up buying Enterprise Google (no behavior change needed), using much of the Web 2.0 aggregation tools, and we were piloting SharePoint when I left. If SharePoint were to work, it would need to be running on desktops automatically/as ahomepage - not an icon that people would need to click through. Sounds stupid, makes all the difference.

* I totally agree that the issues are cultural not technical. I have success, albeit limited, in using a collaboration web to manage projects across multiple centers.

Quality improvement initiatives are good projects for a shared network. There are still major barriers to using electronic space to share outcomes. We still adhere to the idea that we have to create posters and updated paper charts and graphs to communicate with our whole microsystem staff. It would be so much easier if it were part of our daily workflow to see and add to the work.

I think a major barrier is lack of unit-based (hospital unit, clinic section, research group, etc) information support to maintain these sites.
I understand the advantages of being able to set up research project communities and, from my kids, I know a fair amount about the interesting features of facebook type sites. I worry that right now I am expected to check Blitzmail and a DHMC Task list daily. Each of these communication sites receives about 20 items a day for me that warrants a response. Each of them receives about 50 informational items that take more time to delete than to read. I am also expected to take certification tests on the intranet for DHMC, and most scientist have to take certification tests on the DMS and NIH sites. There is also Blackboard which can be very interactive or can be just a one way conduit. People spend a lot of time logging into sites and working through communications already and I worry that a program to encourage collaboration webs offer the opportunity for a plethora of sites that active faculty will need to log into on a regular basis. I know this is retro and I know these sites are meant to enhance communication, but I am concerned that we spend more time each year staring into a screen instead of talking to each other. So, the cultural problem may be that before this forest of communication can develop, there is some deadwood (like me) to be cleared (!), or it may be that no one will be able to see the forest through the trees and lose a sense of overall connectedness.

Question Seven: November 3, 2008

The Dartmouth Medical School's current mission statement is posted on our web site:

"Dartmouth Medical School educates outstanding leaders prepared to transform medicine and science. The school aspires to be the best in the world at expanding knowledge and using it wisely to improve health, all done in the context of the tradition of collegiality of Dartmouth and the values its community honors. We are committed to the challenges of discovery and innovation and to their application to health care that meets the needs and wants of patients and society."

Does this statement still serve our aspirations for the school? Does it succinctly capture who we are and what we value? Here's an alternative; what do you think?

"Dartmouth Medical School educates outstanding leaders prepared to transform medicine and science. The school aspires to be the best in the world at expanding knowledge and using it wisely to improve health, all done in the context of the tradition of collegiality of Dartmouth and the values its community honors. We are committed to the challenges of discovery and innovation and to their application to health care that meets the needs and wants of patients and society."

We asked if this statement still serves our aspirations for the school, if it succinctly captures who we are and what we value.

People don't think the current statement works. Comments included the following:

* However it's written, the mission statement needs to be direct and simple; the current one is neither. Effective statements tend to be clear and crisp, and not require a lot of thought to understand.
* Lengthy mission statements imply institutions don't really know who they are or what they're about.

* The school's current mission statement is a mix of mission-vision-working philosophy. It doesn't say exactly what DMS *does*.

* The current statement overreaches? Rather than say "the best," should it say "aspires to be one of the best"?

* Do mission statements such as the school's current one reflect an obsession with developing *leaders*, versus critical thinkers? Isn't the reality that most people will not become leaders themselves, nor will lead in thought and action?

* Don't use an egoistic tone: "outstanding," "leaders," "best in the world," "elite."

* Refer to "diversity" directly.

* Use the word "physician" or "doctor" (at least once).

* Dartmouth-Hitchcock's progression of mission >>> vision >>> values has praise.
We also received a few whole texts as alternative mission statements.

- I do not think either of the mission statements are succinct at all. I get loss--what exactly does DMS do? Both seem to mix a mission statement with a vision statement and working philosophy, which might be better stated separately. One variation:

Dartmouth Medical School educates and produces clinicians, scientists and leaders prepared to improve health, expand knowledge and transform medicine and science for all.

* I like the first one better (below), but would say aspires to be "one of the best in the world" rather than "the best". It sounds a little more realistic given our resources.

--- You wrote:
"Dartmouth Medical School educates outstanding leaders prepared to transform medicine and science. The school aspires to be the best in the world at expanding knowledge and using it wisely to improve health, all done in the context of the tradition of collegiality of Dartmouth and the values its community honors. We are committed to the challenges of discovery and innovation and to their application to health care that meets the needs and wants of patients and society."

* Since the strategic plan supports the mission, I gather people feel the need to rethink the statement. I wouldn't presume to dive into what has probably already been thoughtful discussion of what DMS should be or do, but I'll jump. I come from the less is better group; to me long missions imply that institutions don't really know who they are.
I think DMS wants to lead, educate, innovate and serve society; we want to transform medicine and science by nurturing outstanding leaders and innovators who expand knowledge, use it wisely and collaboratively to benefit health.Maybe the current first line says it all, but I suspect people will want more, and I'm happy to wordsmith final thoughts. Hopefully, the strategic plan is the place to detail and expand on the goals to support vision, etc.

*Here's a shot at slimming down the mission statement. I tried to eliminate some redundancies. This version, which I don't consider to be a final product, may still be a bit long, but is shorter than the ones you circulated. In particular, the "value" sentence needs improvement.

"Dartmouth Medical School serves to educate outstanding leaders prepared to transform medicine and science. The school, as a component of a major educational complex and in alliance with a nationally recognized medical center, aspires to be the best in the world at expanding knowledge and using it wisely for the benefit of society. We value discovery, application of knowledge and wisdom, nurturing of leadership, and encouragement of individuals to reach their fullest potential."

* I would like to propose a [somewhat altered] combination of the mission statements you included in your email:

"Dartmouth Medical School educates outstanding leaders prepared to transform medicine and science. The school aspires to be the best in the world at expanding knowledge and using it wisely to improve health, while preserving Dartmouth's tradition of collegiality and the values its community honors. Led by a vigorous practice group dedicated to positive change, we are able to utilize allegiances with other elite educational institutions to support our commitment to the growth of individuals to their fullest potential, the challenges of discovery and innovation, and the application of cutting-edge techniques to meet the health care needs and wants of our own patients and of society at large."

*The sentiment is good, but are we trying to bundle too many messages into one? It is a mouthful, could use some refinement.

A general comment: in America it seems that our main goal has become the education of leaders; everyone should aspire to leadership. In fact we can't have so many chiefs, we need some followers. The followers should be equipped with the critical skills to discern good ideas from bad ones, to follow wise leaders and not misguided ones, so that they can then go into their world and perform at a high level. But most people will NOT become leaders themselves, will not lead in thought or in action. We need critical thinkers, but not more and more people possessed that others should be following their lead. That is the role for the few, but the appropriate role for most is to be critical followers.

*I am a relatively new faculty at DHMC, but would very much like to be more involved in the DMS. Making this job change to come to Dartmouth from my former academic position made me realize that I am first and foremost an academician and second an otologist. To this end, I recently meet with Mary Turco to discuss an upcoming event and in our discussion, she said that there was a side group to the Strategic Planning Group that was addressing intergrating and possibly consolidating the many international health
entities at Dartmouth. If there is such a group, I would very much like to be included in that discussion. With regard to your original question regarding the mission statement, although I think the first statement is accurate (and adequate), I prefer the second which I think speaks more to the heart of the community that I was drawn to.

*Effective statements tend to be clear and crisp. From a communications standpoint, and ease of use, it helps if the mission can be distilled into a simple sentence or goal: i.e. to educate outstanding leaders prepared to transform medicine and science. Some institutions, including the college, include a subset of statements reflecting the shared visions and values, while too stick to one liners.

*I personally don't like the use of the word elite in the 2nd version, otherwise think it is better than the original. How about outstanding or exceptional instead of elite? My 2 cents.

*"Dartmouth Medical School educates outstanding leaders prepared to transform medicine and science. The school is allied with <outstanding> educational institutions and a vigorous practice group dedicated to positive change. The school aspires to be the best in the world at expanding knowledge and using it wisely to improve health, all <with deep respect for> collegiality, collaboration, and attention to personal growth and professional <development>. We <prize> discovery, <the>application of knowledge and wisdom, <the> nurturing of leadership, and <the> growth of individuals to their fullest potential."
(Suggested modifications are in <>.)

*The Dartmouth Medical School is engaged in the process of creating good doctors, by providing a foundation for students that will result in the highest caliber of physicians. It is doing this in a time when transforming medicine is a high priority for our nation. It does this in a rural setting, with close ties to Dartmouth College, an ivy- league, liberal arts college in Hanover, New Hampshire with a long history of environmental values, collegiality, interdisciplinary studies, and excellence in teaching. The school is also closely associated with Dartmouth Hitchcock Medical Center, where patient care, research, education, and community partnerships rank among its core values. The Dartmouth Medical School fosters the very highest levels of clinical excellence. It promotes continual discovery and lifelong

learning, careful application of knowledge and wisdom, nurturing of leadership, and the growth of individuals to their fullest potential.

careful. some clauses "stolen" from the University of Washington, at:
http://courses.washington.edu/colleges/
(which you might like to see just for layout approach, etc...)

*"The school will hire and retain outstanding faculty to be the best in the world at expanding knowledge, using it wisely to improve health, all imbued with collegiality, collaboration, and attention to personal growth of our students and professional formation. DMS's mission is provide opportunity through allied elite educational institutionsand a vigorous practice group dedicated to positive change. DMS's mission is to encourage discovery, application ofknowledge and wisdom, nurturing of leadership, and growth of individuals totheir fullest potential."

Wouldn't you need to say something about the faculty? When people read the mission statement, I would think they would want to know that DMS's mission to find the very best to teach the student, and then do everything possible to retain them.

Vision

What is your vision for DMS? "Dartmouth Medical School's vision is to educate outstanding leaders prepared to transform
medicine and science." ?? That through the education obtained at DMS with outstanding faculty and facilities our students will be the leaders in their chosen field? Wouldn't that be first, then the mission would be next to say how you are going to get there?

Thank you for the opportunity to share my thoughts on the mission statement.

* I dislike both mission statements because:

a) I don't like the egoistic tone: "outstanding" "leaders" "best in the world" "elite"

b) never once is "doctor" or "physician" mentioned

c) the wording is so high-toned and "smart" that it makes me THINK too much

e.g., "educates outstanding leaders" -- what? so every family practice doc is to be a "leader" ...?

"transform medicine and science" -- what?

"best in the world..." -- what are the context and the metrics and the need for such an idea

"allied with elite educational institutions" -- that would be Dartmouth and ... what...?

*The second (newer) version sounds a bit pretentious (almost to the point of being disingenuous).

* Thanks for sharing these statements with us. I personally prefer the second statement (below) since it uses more superlative in its tone which should truly be the general attitude of the DMS community. We do not strive to be "good" but "among the best". I think maybe further emphasis on research could be achieved in the first and most important sentence of the second statement. I believe the research infrastructure at DMS may not be able to out compete that in peer institutions in sheer volume however it is absolutely adequate to aspire for DMS to be among schools of highest quality when it comes to research and education while maintaining its medium size. The "Small size and high quality" model has shown great success for instance at the Rockefeller University which houses only 70 laboratories, yet each head of laboratory is a leader in their field.

*I imagine diversity comes under "the values its community honors," but I wouldn't mind seeing a specific reference in the mission statement.

*I think the most important long range goal would be to put the medical center together physically. Of course this is the most difficult and expensive project

Question 8: November 17, 2008

Is it timely to consider new models for adapting to and surviving in a prolonged period of minimum or no real growth in NIH funding? What would such models be? Please send your thoughts and comments to Bill.

*That is a question that should have been asked eight years ago. Given the very specific goals of investing in science and technology as 'engines of productivity', the stated goal of doubling NIH funding over the next ten years by the Osama administration, is not likely to be relevant to our future.

Regarding the eighth question for the DMS community (NIH funding), we must not temper our enthusiasm to become a "major research" institution, yet we must factor secular realities into our formula. One way in which to adapt to the three-year moratorium on NIH extramural grant funding (DVA may be even more tightly constrained, budgetary) is to
seek to establish "Research Centers of Excellence at Dartmouth".

Such Research Centers of Excellence would ask current faculty, rather than new recruits, to set broad biomedical research goals with a unifying principle, such as "The Dartmouth Bioiron Institute". The director, staff, and faculty unified by an intellectual interest, high aspiration, and mutual respect would set specific projects such as "Iron Metabolism in Immunization and Immunomodulation", "Iron in Atherosclerosis", "Metabolic Manipulation of Iron by Hosts and Microbes", "Iron, Cancer, and Cancer Vaccination", "Sorting the Iron from Alzheimer's disease", "Heme-Iron Dysmetabolism In Brain Trauma", etc. Each Center of Excellence would have some curricular responsibility for each of the traditional four-years of the MD program; and heavier responsibility to support one, or more, MD-PhD programs, to include MD-MS engineering. The important and final step would be to seek funding from major foundations, such as the Gates, Carnegie, Melon, Robert Wood Johnson, Commonwealth Fund, etc. Appeals for funding would emphasize the basic, yet translational nature of the biomedical research performed in each Center of Excellence. The charitable foundations will also be constrained economically over the next several years as the global economy contracts, yet their mandates often shift less with the political winds and with economic tsunamis than NIH and DVA budgets. Don't know much about NSF funding; but suspect it will not grow appreciably in the next several years.

Such a course would follow, and improve upon, the James Shannon-NIH, intramural biomedical research and clinical model which has proven quite successful over fifty years.

*Part A... yes.

Part B...

You will have heard some of this before, but it bears repeating. First, back to basics. To whom does DMS provide value? Patients (attraction and retention of world-class clinicians and researchers, all the things that are good about a teaching hospital, products: therapeutics / diagnostics / devices / prophylactics), students (education, reputation, accreditation), alumni (networks and reputation, primarily), Dartmouth College (reputation, revenue, educational opportunities... many more), MHMC (see "Patients" and "Dartmouth" plus access to facilities), local residents (quality of life), local businesses (quality of life, economic anchor (in the good sense), influx of customers - patients, families, commuters, visiting scientists/researchers, etc.), employees (obvious, I hope), industry (IP and consulting, primarily), rest of academia (publications/ advancement of science, peer review, etc.), local,

state, and federal government (revenues, economic development in all its forms), this is a list I put together in 2 minutes - its well worth your time to fill it out properly with a diverse, creative, and vocal group.

Second, consider to whom we might provide value, but currently do not (or not much). For example, DOD, NSF, national labs, non-US governmental entities, non-US private entities... this list may be difficult to fill. It would at least be fun to discuss building co- branded medical schools in the Middle East, India, and China as a revenue stream.

Third, look at all the the parties, and consider: a) which of these has money to spend, b) which of these cannot do without us, or at least COULD get a lot of value from us, and c) what is the gap between the value we think we provide and the value we actually capture from this group?

This exercise will generate some new perspectives that will hopefully get the group out of the box. E.g. local residents - we don't think of local residents (or for that matter, their real estate agents), as direct beneficiaries of our work. But they most certainly are. Might
they donate if we made this appeal? Might they pay a few extra bucks on an optional co-pay when receiving treatment or filling a prescription? Might some amongst them be so attuned to our value so as to take up the cause and raise funds on our behalf? Might we offer courses to the public (continuing education, general interest in medicine, perhaps residents audit existing courses, perhaps specific courses could be taught by med students) - the boomers are retiring, they're interested in medicine, and they've got money to spend...? This is the most extreme example on my list - I believe the rest are easier and more realistic, but even this 2 min list deserves at least 2 min of consideration.

A contrarian view is found in Jack Welch's first changes at GE. For the first years of his tenure, he instituted a rank-ordering evaluation system and fired the bottom 10%. After a few years of this, the gigantic unwieldy entity that is GE was lean and extremely high- functioning. I believe this was the best executive decision by one of the best executives. I can even go into the long-term advantages to those who were let go, but we're already far from the trail. The days of NIH-doubling milk-and-honey are indeed over. Perhaps responding directly to this reality by marking our own growth to theirs is the best way. I fully support the spirit of this question, and hope we do
a thorough job of chasing down every top-line opportunity, but for what its worth, I'll go ahead and predict that these creative methods may get us a few bucks, but won't turn the tide. So we're back to a fixed pie wrt NIH, which means we have to out compete our peer institutions, which is a whole other story, which I assume others will address in response to THE EIGHTH QUESTION.

*I made the same points about the potential for greater WRJVA interactions this past week to two different visitors (including to the Hampers candidate in Nephrology), but not in the context of a different financial model for DMS that will increase the $$ base on which DMS operates. I certainly agree that we would want to maximize funding opportunities through the VA. That said, we need to liberalize the 3/8 and 5/8 rules, the way I have see SF, SD, Iowa, etc, do.

*I would add one other point, and that is to more fully leverage the VA, and the variety of funding mechanisms available, as an underutilized opportunity. And with the recent change in leadership there, some traditional barriers may become less onerous.

*I am heading out of town, but I wanted to quickly write down a few ideas that address your latest question. To consider new models for adapting to and surviving in a prolonged period of minimum or no

real growth in NIH funding, we need to have a strategic approach that is based on the following principles.

1. Support greater inter-disciplinary and programmatic synergism between our basic, clinical, translational, and health-services research programs. While the NIH funding climate has been unfavorable to RO1 mechanisms, many institutions have been able to increase funding through programmatic larger scale grants, such as PPGs. We need to nurture and support faculty who have strengths in >garnering such funds.

2. Support the hiring of physician-scientists into clinical departments who can compete for NIH-funded pre-clinical and translational research funds, as well as for many foundations that fund translational research.

3. Establish a "cluster hiring" mechanisms for joint inter-departmental and cross-school hires in a manner that increases our competitive edge for garnering extramural funds and that "shares" the credit for indirect costs generation among the involved departments/schools.

4. Raise philanthropic $$ to create many more endowed chair positions into which one can hire top notch investigators who will have the time and resources to compete for extramural funds. In this regard, liberalizing fund-raising targets so that chairs could get the support of the Development Office in order to raise funds for their respective programs could change the "culture of giving" in the Upper Valley and beyond, and magnify our potential to raise such funds.

5. Promote in a more vigorous manner academic-industrial partnerships that enhance our training programs, teaching capabilities, IP potential, and patient care activities.

6. Once all of these actions have been solidified, propose to Dartmouth College that if DMS generates indirect $$ in excess of a certain amount, the percentage of the $$ above a pre-determined level that DC retains will decrease, and more will go to DMS to allow it to support programmatic mechanisms for further increasing >extramural funds. This will be a tremendous incentive for DMS and its faculty, and will lead to a total increase in $$ received by >both DC and DMS. I hope this helps. Even if each of these points is not necessarily novel, a multi-pronged approach that addresses all of these issues concomitantly will enhance the potential for a successful outcome. I am copying DOM VCs for research and Academic Affairs to solicit their input, since they are funded investigators with considerable know-how.

My only concern would be if the new models focus too much on translational or commercial applications in a way that is in conflict with training graduate students and undergraduates. Recognizing and facilitating collaborative research may increase the number of labs that benefit from a given grant. Space for shared equipment would be useful.

*Your week 8 question is extremely timely, given that we just heard that HRSA grants will not be given out this year.

The world of funding is changing. While I'm not sure how to make up for that, I believe that appointment and tenure policies will have to change to reflect the fact that many extremely valuable

and able young investigators will not be able to obtain the 'magic' RO1 needed for promotion. Given that many of these folks could already earn a lot more
money in industry than they can in academia, we need to find ways to reward their work when money is tight.

*Of course we should consider new models, or at least pay attention to having a diverse portfolio.

I am not a huge proponent of industry-sponsored research, but recognize it can be done in a professional and ethical way, and should be part of our portfolio.

We should also look at entrepreneurial activities--potentially as an investment, where the product of research may lead to return on investment.

Of course, foundation and philanthropy are essential components to research as well.

I'm not sure what other options might exist other than looking outside U.S. to international funding sources.

*we need to operate more efficiently
job share - can one person work in two areas maybe instead of letting someone go or not filling a position?
*look at all the areas that we CAN measure (like businesses do) to be sure those are operating at top efficiency.
Can we deliver educational content in a different way?
Compensation is huge. Perhaps we need to keep salaries static or even cut.
No extra $$ over budget, period.
What can we do differently to accomplish a job?

*Do we have programs we can shed? Normally used by undergraduate schools, but maybe we can use this method too?
*Just a comment, but it looks like we may have just added a department - with additional expenses. I can't envision a worse timing if I tried.
*Research grants don't pay all the costs. And in this economy, it might take five years to get grants; how will we support the faculty member? Are you set with grants to cover the labs?

These opportunities could include being a facilitator or preceptor in On Doctoring; facilitating a small group in PBL, HSP, or other courses, doing a block of attending rounds with Medicine; etc. * Learner mentoring: create a system that guarantees that each student and each resident--and junior faculty member--has a faculty "coach" who meets with him or her regularly to "check in" on stress, career development, life,etc.