

The Research Advisory Board (RAB) of the University of Texas at Dallas (UTD)

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"Research", however defined, is the soul of a research university. Therefore, it is only logical that a Vice President for Research, such as myself, assembles a Research Advisory Board (RAB) to provide guidance and wisdom for my office in particular and the university in general in pursuit of research excellence.

To this end, one of my first tasks when I came to UTD three years ago was to work diligently to bring together such a group. The criterion of membership for the RAB is simple. Each individual must be

Internationally known;

A significant practitioner, policy implementer and/or administrator in his/her sphere of activities.

Members of the Board must represent a cross section of academia, industry, government and national laboratories. After three years of hard work (especially after a mammoth number of emails to the group after they were assembled), I believe that we finally have reached the point where the group feels sufficiently empowered, with enough knowledge of the various research programs in UTD and how that could be translated into serious and sustainable regional, national and international research outreach, to support UTD's research enterprise.

It is my personal belief that without such outreach, it would be even more arduous for UTD to attain international intellectual and economic powerhouse status.

Currently, there are 29 distinguished individuals in the RAB of UTD. They include university presidents, world-renowned faculty members (from economics to nanotechnology) from leading universities, members of the National Academy of Science (NAS), members of the National Academy of Engineering (NAE), senior managers of high-tech corporations, locally and nationally, company founders, and high-tech senior managers of Department of Defense (DoD) centers.

Approximately once every six months, the RAB meets at UTD to discuss many issues, from those confronting the UTD now to long range vision. Between the meetings, members interacted intensively with my office through all forms of communications, so that when they come to the meetings, they were well aware of the university's evolution.

On March 11, 2004, we had another such meeting at UTD. The night before (March 10th), through the generous support of Vinson and Elkins, LLP, a major law firm of

Dallas, a reception was held at the elegant McDermott Suite of UTD.

Members who attended this meeting on March 11th were

Dr. Robert Budica, President and CEO of Agusta Aerospace
Dr. Armand Chaput, Senior Technical Fellow of Lockheed Martin
Dr. Lynwood Givens, CTSO of Information and Intelligence System of Raytheon
Mr. Tom Hill, EDS Fellow,
Dr. Bob Johnson, Founder of ADB Consulting and former Chief Scientist of
Information and Intelligence System of Raytheon
Dr. Scott Lillibridge, Director of the Center of Biosecurity and Public health
Preparedness of UT Houston health Science Center
David McCombs, Chair of Haynes and Boone's Technology Practice Group
Dr. Joe McCormick, James H. Steele Professor of UTexas Houston health Science
Center
Dr. Terry Michalske, Director of CINT of Sandia National Laboratory
Mr. Dale Moore, Director of Aerospace materials Division of NAWC
Dr. Peter Pappas, Vice President of SAIC
Mr. Jack Pellicci, Group VP of Oracle
Dr. John Quigley, Donald Turner Professor of UC Berkeley
Dr. Robert Potter, President of R J Potter Company
Dr. James Yoh, President, CEO and Founder of Galaxy Scientific Corporation.

One aspect of this meeting was unprecedented. Four deans came to the meeting. They were: Burt Moore of the School of Behavioral and Brain Science, Bob Helms of Eric Jonsson School of Engineering and Computer Science, John Ferraris of the School of Natural Science and Mathematics and Hasan Pirkul of the School of Management. All gave extensive presentations about the achievements of and challenges facing their respective schools. Each talk was peppered with a large number of questions, during and after. I was especially pleased to see that several deans were very enthusiastic of UTD developing a "dynamical" (i.e. one that changes with time and conditions) research strategic plan.

I was also very pleased to see that Dennis Kratz, Dean of the School of Arts and Humanities, came to the reception and interacted extensively with a number of the members of the RAB.

In my opening speech of the meeting, I mentioned several "Bars of Excellence" which UTD's research enterprise must cross.

The first and foremost is the quality of our undergraduate students. I told the group that in 1990, when UTD began recruiting freshmen, it had to do it under the auspices of a Regents' demand:

"At a minimum, in addition to other qualitative criteria that the board may establish, the

board shall provide that the admission criteria for entering freshmen and for transfer students with less than 54 semester hours of college credit be no less stringent than the criteria for admission to The University of Texas at Austin for those students."

This was truly a stringent "Bar of Excellence" for a brand new undergraduate program. After all, UT Austin was and still is the flagship of the UT System and has been accepting freshmen ever since day one, over 100 years ago. Therefore I am absolutely proud to see that my colleagues in UTD's administration were not crushed under this weight. It is very interesting to note that in 1997, when UTD accepted only 600 freshmen, the average SAT was around 1200. Last year, in 2003, UTD accepted nearly 1300 freshmen, and the average SAT score, did not go down as conventional wisdom would dictate, but actually went up to 1225!

Several questions arise from this situation: Yes, we have met the bar, but should we go above it? If so, is that feasible? There were some, but not a lot of, discussion about this from the group. One member told me that he was absolutely startled that there was "such a Bar". He further said that he was even more amazed that we met it.

Alan MacDiarmid, UTD's James Von Ehr Distinguished Chair in Science and Technology and Chemistry Nobel laureate in 2000 often said that "science is people." What he meant is that the most important asset of a university is the quality of its people. At one end of the spectrum are the undergraduates. At the other end is the faculty.

Quite recently, a formidable "Texas Bar of Excellence" for researchers in science, engineering and medicine, was put forth by the Senior Senator of Texas, the Honorable Kay Bailey Hutchison (<http://hutchison.senate.gov/>). A few months ago, she initiated a highly prestigious Texas Academy of Science, Engineering and Medicine (<http://hutchison.senate.gov/prl480.htm>). Membership of this Academy consists of Nobel laureates, members of the National Academy of Science, National Academy of Engineering and the National Institute of Medicine.

I was impressed with the reaction of the members about this during the break. Several members said that this is quite a goal and they were indeed impressed that the Senator aims "so high." However, since UTD intends to be a national top tier university, it is imperative that faculty recruitment needs to seriously consider this, if it is not already a common practice. All relevant schools, and, indeed the entire university, must be ready to carry out the arduous task of projecting career paths of potential faculty members. At the same time, some members of the RAB suggested that we (i.e. UTD) must work strategically within the university to see whom within the current faculty ranks, are likely to achieve this bar. Once identified, UTD needs to follow up with all the necessary intellectual and political moves to ensure that it can happen.

Finally, I must thank Dr. Robert Potter for helping us in the logistics of the meeting. His meticulous input was palpably felt by all throughout the meeting.

There are now a great deal of "follow up activities" resulted from this meeting. Please stay tuned!