

Welcoming Comments on August 18th, 2003 to UTD's New Faculty Members

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Dear Colleagues:

Let me first take this opportunity to warmly welcome you to The University of Texas at Dallas. My name is Da Hsuan Feng, and I am the Vice President for Research and Graduate Education. Like you, I also am fairly new to UTD. I came here 31 months ago from industry.

I would assume that the majority of you are at the beginning of your academic career, as tenure track Assistant Professors. Some of you are in your intermediate career, as Associate Professors, with or without tenure. Finally, a small number of you were invited to UTD to be leaders, as a Full Professor with tenure, in building specific areas of intellectual pursuits. One of you is the new Dean of Eric Jonsson School of Engineering and Computer Science, Dr. Robert Helms. I am sure all of you have chosen to be here at UTD because you are a world-class intellect.

Today, let me just paint for you the research landscape of UTD as I see it. There are many technical issues, such as grants and proposals, intellectual property issues, technology transfer concerns and so on which my able staff members will organize a number of working sessions in the coming months for you to learn in detail.

As someone once said, the most three important criterions for real estate is "location, location, location." What that means is no matter how magnificent the architecture of the house you may be constructing, without a good location, it does not really matter.

Research of today generally means multi-institution collaboration, attracting and nurturing new outstanding faculty, bringing in brilliant young postdoctoral and graduate students to work in exciting areas of research, procuring very expensive frontline and state-of-the-art equipment to keep the research on the cutting edge, and publishing new and innovative results in prestigious journals as well as presenting those results at national and international conferences. With that in mind, I think you will agree with me that while you are or intend to be one of the world leaders in your area of research, the three important criterions you all are faced with are "funding, funding and funding."

In fact, my favorite statement nowadays is "vision without funding is hallucination".

Let me read you the mission of my office as stated in our website, which is <http://www.utdallas.edu/research>.

“The Office of the Vice President for Research and Graduate Education of the University of Texas at Dallas (UTD) identifies areas of intellectual importance, promotes the university as an economic and innovation engine as well as further activates UTD’s development as a world class university. In addition, the office promotes the university’s “knowledge” products and collaborates synergistically with local, regional, national and international corporations and governments to enhance the global vision and impact of science and technology.”

As you have heard either directly or from the grapevine that UTD is a developing research university. In fact, in the past 31 months, I have seen it rapidly approaching an intensive research university, with a grand vision of becoming one of Texas’ national powerhouses in research.

Someone once said that for UTD to be considered as a world class research university, the school needs to bring in \$100 million of external research funding. To this end, I should say that there are only two public non-medical universities in Texas that have achieved the distinction of having “\$100 million external research funding.” They are Texas A&M and The University of Texas at Austin. In fact, both are well above \$400 Million. The next closest is the University of Houston, which is about \$80 million.

For UTD, between 1990 and 1994, the external research funding hovered around \$10 million. In the past several years, it began to grow, and grow very rapidly. For example, in 1999, it was \$14 million while this year (which we still have a few weeks to go before we close the book), it is approaching \$28 million. While doubling the external research funding in 4 years is breathtaking, we are still far from the target of \$100 million. Hence, we still have a great deal of work to do!

Let me also give you a few anecdotes about our research activities in the past several years.

With the help of the surrounding technological communities, with the total commitment from the administration for excellence, and with the unadulterated support of the existing faculty members in science and technology, UTD attracted some of the national leaders in a very hot area of interdisciplinary research: material science, with a strong focus on nanoscience and nanotechnology. Thirty-one months ago, we had essentially no one -- no faculty, no postdocs, no grad students and no undergraduate students -- working in this area. Next week, UTD is sending to one of Texas’ major research conference in this area in Austin, not one, not two persons, but a scientific army of nearly 50 people. Of the 50, four are giving plenary talks, and one, our new Nobel Laureate in chemistry, Alan MacDiarmid, is giving the keynote. In the group are assistant professors, associate professors, postdocs from all corners of the world, as well as graduate students. We even have a couple of brilliant high school students who worked in the nanotech labs this summer, who will have posters showing their work in this conference! I would be remiss if I did not say that this project, now in consortium first with UT Austin and Rice, and now with UT Arlington, UT Brownsville and UT Pan Am, have received incredible political support in Texas, especially from Senator Kay Bailey Hutchison.

The other is our effort in growing what we refer to as a “post-genomic disease centric” program. With the human genome project completed about two years ago, UTD decided that since we were behind in this game, the only way we might become a national leader (because if we cannot be one, it is best not to pursue it with vigor) is to “think out of the box.” So, concentrating in a disease which is closely linked to the human genome, and is closely linked to the clinical effort of a health research powerhouse in town, the University of Texas Southwestern Medical Center, seemed to be an expedient way to rapidly reach national prominence. We hired Professor Steve Goodman from the University of South Alabama, who with his counterpart in UT Southwestern, was able to compete successfully for one of the 11 Congressional mandated NIH centers on sickle cell. Then we hired one of his colleagues from Alabama, Professor Betty Pace. I am very excited to announce to you that Betty, who is in the audience, has just been nominated as one of the ten most brilliant young scientists by “Popular Science Magazine!” Again, here I would be remiss if I did not say that Congresswoman Eddie Bernice Johnson of Dallas, the former Black Caucus chairperson, is a great supporter of this effort.

I also should mention that we are very proud of the exciting brain research in the School of Behavioral and Brain Science. This area of research benefited a great deal from our intellectual proximity with a world-class health research institution, The UT Southwestern Medical Center Department of Radiology. Jointly, we intend to build a world level brain and cognitive research program that will be centered around a 3 tesla functional Magnetic Resonance Imaging facility.

We also have very active research in many of the Department of Defense projects, especially those we are heavily cultivating with the Missile Defense Agencies through a consortium of a number of research powerhouses, such as Penn State University, Georgia Tech and UT Austin. In the School of Social Science, a strong collaboration was initiated with Oracle Corporation where there is now an Oracle Center of Excellence for Spatial Data. We also are in discussions with the Naval Air Warfare Center, Sandia National Laboratory, Raytheon, Lockheed Martin and Bell Helicopter for collaboration.

I want to also stress that besides large corporations such as TI, Raytheon, Lockheed Martin, and the likes, we are also very aggressive in developing win-win relations with mid-size companies. These are companies which have annual revenue between ten million to several hundred million dollars. We are also searching for innovative collaborative “small business” opportunities.

Last but not least, we have an active on-going Homeland Security collaboration with EPA Region 6. This collaboration was initiated well before 9-11.

I want to stress that UTD views research not as a separate effort from educating our students, undergraduates, graduates and postdoctoral and other research fellows. Research is a deep and profoundly integral part of the entire university educational package.

Whatever your current positions are at this point in time, one thing is for certain, you do not want to waste any time in aggressively and actively pursue your research agendas. You will want to quickly and seamlessly initiate your research programs in the transition from your previous positions. The success of your professional career at UTD will be measured by your peers in the global community of your field and by your colleagues in UTD on how robust a program you will initiate in the coming years.

In summary, as Vice President for Research and Graduate Education, my job is to see to it that you can be as successful as you possibly can be in developing your professional careers in the coming years. I will measure my success by how successful you are, and how well the entire intellectual, economic and political communities in the State of Texas judge the research enterprise of UTD.