
M. D. Anderson

Straight talk with… Ronald DePinho

On 1 September, Ronald DePinho became the new president of the MD Anderson Cancer Center at the University of Texas in Houston. He arrives there after 14 years at the Dana-Farber Cancer Institute in Boston, where he was founding director of the renowned Belfer Center for Applied Cancer Research.

DePinho is now in charge of remaking Houston as a hub for cancer drug development on par with Boston, and one of the first items on his agenda as president of MD Anderson is overseeing the creation of a new Institute for Applied Cancer Science. His wife, cancer geneticist Lynda Chin, is the scientific director for the institute, which is backed by a five-year $75 million base contribution from the University of Texas system promised in July.

The power couple has already lured 22 scientists to the institute from their previous home in Boston. And DePinho has promised that by the second quarter of the 2012 fiscal year the new institute will be at or above the basic science capacity of the operation he left behind at the Belfer Center. **Rebecca Hersher** spoke with him about his decision to go to the Lone Star State and the current status of the cancer field.

Why did you choose make the big move to Houston?

My decision to go to MD Anderson is a reflection on what's going on in the field. It's very similar to what we experienced in the 1960s when we decided to go to the moon. We didn't quite have all the technology or the knowledge to execute the goal, but we had a line of sight.

MD Anderson is an 800-pound gorilla that has the opportunity to move the field forward and take advantage of this significant opportunity. It has 11,000 [cancer] patients on clinical trials and 1,400 faculty who span basic to clinical research. Frankly, there's no job I would have left the job at Belfer for except this one. This is the job that has the greatest ability to influence what is going on in cancer.

What, specifically, are you hoping to do differently from other cancer institutes?

If you look at the rate of cancer drug develop failure, it's a 95% failure rate, with over 50% of failures occurring in late-stage clinical testing. We fail in large part because we don't do enough due diligence at the preclinical stage. One plan I have is to develop a significant 'mouse hospital' to develop very sophisticated mouse models for cancer, as well as a human primary cell repository to allow evaluation and development of therapies. MD Anderson already has the largest imaging program in cancer. With modeling and imaging knowledge, we can give the private sector a better idea of which clinical path will be successful.

How will you attract pharmaceutical companies from elsewhere down to Texas?

Houston is like Boston was ten years ago. There were very few medical companies in the Boston area, and in the last ten years they have moved into Boston in part because there is a very robust biotech industry. A lot of investigators in Houston are already collaborating with drug companies.

One thing I have planned is a more integrated continuum between preclinical and clinical [research]. The idea is that with the Institute [for Applied Cancer Research], MD Anderson will be able to enhance the ability of pharma to evaluate the compounds coming through the pipeline. Our medical complex [the Texas Medical Center in Houston] is the largest medical life sciences complex in the world.

The majority of the scientists currently employed at the Institute for Applied Cancer Science consists of 55 staff and students that you and your wife recruited from the Belfer Institute at Dana-Farber. How did you convince them to move with you?

These are people who feel they want to have a very significant clinical enterprise as well as infrastructure that enables primary drug development. For the first time, now we can do expert analyses in humans that are so penetrating and comprehensive that it rivals the kind of analyses that yeast genetics have given us. We have the ability to do really impressive basic science in human specimens. MD Anderson is the best place to do that because it has so much clinical capacity; so many of the people you hear about coming down will be people who are interested in moving their basic work into the translational space.

Dana-Farber is one of many cancer centers launching initiatives to catalogue genes from tens of thousands of tumor samples. Is a large-scale genetic database for cancer the best use of limited resources at MD Anderson as well?

I think it's not a matter of whether we can afford to do this—I think we cannot afford not to do it. Cancer is a disease of the genes. We have to know how cancer is hardwired to become malignant.

In today's economic climate, how does a research center like MD Anderson keep accelerating its growth?

Raising money has not been a problem for us. We actually had to end our capital campaign because we raised our $1 billion target almost two years earlier than expected.

We have a $75 million base commitment from the Texas legislature. But this is going to be a multi-hundred-million-dollar enterprise. We'll raise the rest of the money from a combination of philanthropy, grants to a certain extent, and eventually a return on investment from corporate interactions.

Corrected after print 31 January 2012.

Correction

In the January 2012 issue, in the article entitled 'Straight talk with Ronald DePinho' (*Nat. Med.* **18**, 9, 2012) the 22 scientists who moved to the MD Anderson Cancer Center at the University of Texas in Houston were incorrectly referred to as principal investigators. In addition, the article stated that 55 people had been recruited from Dana-Farber, but these included trainees in the laboratories of Ronald DePinho and his wife Lynda Chin. The error has been corrected in the HTML and PDF versions of the article.