

Acing the TEST

By Brian Walker

COGNOSCENTI HEALTH INSTITUTE

Cognoscenti Health Institute is at the forefront of research that will determine how future patients are diagnosed and treated.



It's been two years since Dr. Philip Chen established Cognoscenti Health Institute, an innovative, full-service medical lab in Orlando's east Orange County business park. From the onset, Cognoscenti (a word of Italian origin that refers to a group that is "knowledgeable" or "cutting edge") merged advanced biomedical testing procedures with customized Internet technology in order to expedite highly accurate test results that save local physicians both time and money.

Having launched Cognoscenti under the auspices of the University of Central Florida's (UCF) Technology Incubator Program, Dr. Chen praises the organization for its strong infrastructure and support in helping new businesses establish themselves in Orlando.

"[They] were invaluable to us in a number of ways," he states.

In addition to flexible leasing plans and shared support costs for prospective new businesses, the Incubator Program also offers everything from a broad range of business training to expansion capital opportunities that assist companies at every step of their development.

"One area where they were of particular help was in providing financial training that helped me to formulate a more sound business plan," Chen says of the program. Incubator representatives also introduced him to an outside firm that handles the company's human resource requirements.

"We're very excited about the success of Cognoscenti Health



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Institute and glad we are able to provide assistance that helps these kinds of companies reach their potential," says Tom O'Neal, CEO of the UCF Technology Incubator. "Dr. Chen's company is a great example of what we are trying to accomplish."

POISED FOR FURTHER GROWTH

Dr. Chen's business, which he owns jointly with a Boston area entrepreneur, has far exceeded initial expectations. A growing list of doctors, mostly referred from existing Cognoscenti clients, continue to be swayed by the quiet Chen's dedication to medical research and a business concept he drafted on a breakfast napkin back in his Harvard residency days. Lab results that once took a week or more can now often be delivered inside 24 hours. Doctors can access patients' results via the Internet or through a private direct network, cutting back drastically on the time required for analysis and diagnosis.

He points out that Cognoscenti is the area's only established full-service lab and even handles regular samples requiring advanced testing that are flown in daily from south Florida. Chen picked Orlando as a prime market for his start-up business due to its large and growing population.

"We saw that Orlando didn't have a local lab facility and that there were often long lag times for test results when local doctors sent samples off to national laboratories," he explains.

It's a commonly known fact that over time test samples degrade. The quicker analysis is performed, the more accurate and precise the results. When compared to the rest of the country, it was uncommon to find a city the size of Orlando without a resident medical lab. Chen, who has family roots in the city and attended Valencia Community College early in his academic career, quickly determined that Orlando was ideal for launching Cognoscenti Health Institute.

The company, which handles upwards of 700 patient samples daily, is currently approved by United

Healthcare of Florida's HMO and PPO, as well as the government's Medicare and Medicaid programs. While there is some level of frustration in working towards full acceptance by big insurance companies like Aetna and Humana Inc., Chen is confident they will eventually approve Cognoscenti.

"Because we are charging only the standard rate fees established by the insurance industry, there doesn't appear to be any legitimate objection to utilizing our lab," he claims.

Given his company's growing presence with Orlando physicians' offices, it's most likely just a matter of time before the big healthcare providers take notice. Chen is poised for expansion, with 14 acres purchased in the Central Florida Research Park and five newly opened patient service centers for sample collection. Currently, his advanced testing equipment is only running at about 20 percent capacity.

PRODUCING RESULTS

Already, the structure of Cognoscenti's operation provides a closer melding of physicians with the laboratory testing facility. The advantages of working with a local staff of highly trained technologists offer doctors faster and more accurate information upon which to base their diagnoses. Because of this much more symbiotic relationship, the level of personal service and information sharing is greatly increased, ultimately benefiting the patient.

Edward Lowenstein, Medical Director of local Community Health Centers, Inc., concurs. "A primary advantage for us is the consultative role Cognoscenti takes in providing and helping to select the most technologically-advanced and cost-effective testing procedures on behalf of our patients."

There's definitely been a movement of biomedical technology.

"We have taken clinical services at the academic level and brought them into the community," Chen explains.

As medicine becomes more and more decentralized, advanced

NURTURING TECH BIZ

The University of Central Florida (UCF) Technology Incubator opened in 1999 and has grown to include 55 emerging technology companies. The Incubator's mission is simple: A University-driven community partnership providing early stage technology companies with the tools, training and infrastructure to create financially stable high-growth companies.

The Incubator serves the region's technology industry sector by specializing in leveraging the intellectual capital and resources of the University and community to give new companies a competitive advantage.

To date, the program has served more than 70 companies, which have been responsible for creating more than 450 new jobs in the area, generating more than \$150 million in revenues and securing more than \$90 million of investment.

For more information, visit www.incubator.ucf.edu.

technology, once unique only to big medical centers, is following the trend and finding its way down to the level of medical practice, or the community.

Until now, doctors have been limited to a menu list of test choices offered by national labs. Conversely, Dr. Chen has shown a willingness to add to Cognoscenti's some 350 in-house testing options and has even tailored and streamlined new analysis to fit certain physicians' specific requirements. Additionally, Chen works closely with area doctors to custom tailor computer screens, thereby better facilitating testing procedures and offering insight and Medical Logic Models that suggest testing options relevant to documented case histories.

LEADING MEDICINE'S REVOLUTION

Chen explains that the healthcare profession is poised for revolutionary changes that will focus more on "evidence-based" medical practices and take advantage of new technologies as they become available.

"Personalized medicine that focuses more directly on the individual is probably going to be the dominant influence in new medical practices for the foreseeable future," Chen theorizes.

Cognoscenti Health Institute, with Dr. Chen at its helm, is at the forefront of research that will determine how future patients are diagnosed and treated.

"Medicine never has been a one-size-fits-all concept," he says.

Pharmacogenomics technology, for example, is a cutting-edge scientific process designed to better understand how current medications work inside our bodies. In a nutshell, the technology is the study of how an individual's genetic inheritance affects the body's response to drugs. The term comes from the words pharmacology and genomics, and is thus the intersection of pharmaceuticals and genetics.

Working in conjunction with researchers from Harvard Medical School and the University of Pittsburgh, Dr. Chen is leading a case study to identify and categorize up to 37 human



PHOTO COURTESY OF US DEPARTMENT OF ENERGY HUMAN GENOME PROGRAM

genetic markers and document how certain chemotherapy drugs have interacted with each. The hope is not just to prescribe existing drugs with a greater margin of efficacy and safety, but also to lead the development of powerful new medications that more directly target diseased cells.

Dr. Chen explains, "Rather than taking a trial-and-error approach to establish a course of therapy, pharmacogenomics will allow doctors a powerful analytical tool, whereby they have accurate medicinal data regarding a patient's genetic profile, to prescribe the best drug therapy from the onset."

Currently, it's estimated that nearly 100,000 people die each year due to adverse drug response, with countless more hospitalized.

The further advantages to this new

technology are far reaching and include being able to test early for predisposition to certain diseases, creating better vaccines, improved targeting for drug testing and overall reduction in the cost of health care.

Dr. Chen is modest and unassuming when talking about Cognoscenti Health Institute, although he's pleased with the level of success achieved. On the other hand, he is adamant about the company's progress and commitment to the Orlando area.

"It's been a very rewarding experience working with local businesses. We are looking forward to continued growth," he says.

One thing is certain, he is determined to stay abreast of the latest advances in biomedical science. And that translates to better healthcare for everybody living in Central Florida. ✕