

## LIFE SCIENCE & BIOTECHNOLOGY

*"There may be no other place in the world like Orlando when it comes to life sciences, biotechnology and healthcare. Right now there is a tremendous convergence of opportunities due to our community's imagination and collaborative effort to bring forward a new 'medical city' clustered around the University of Central Florida's College of Medicine, world class medical research operations, and equally impressive healthcare providers concentrated on improving your quality of life. Florida's great agricultural heritage and an emerging energy sector, combine to create Central Florida's 'bio' opportunity which is to feed, fuel and heal the world. As a top international destination, Orlando is a gateway to the world providing unparalleled connectivity in a global economy. We are proud to say we have called Orlando our home for more than one hundred years."*

—Lars Houmann, FACHE  
President & CEO, Florida Hospital/Chairman, bioOrlando

Metro Orlando is poised to become one of the most advanced industry clusters in the world for life science. In fact, the region is one of only two locations worldwide that is currently constructing an all-new 'medical city', a move serving to differentiate Central Florida as an industry and research leader.

Anchored by the University of Central Florida's College of Medicine and the Sanford-Burnham Medical Research Institute – a premier, non-profit medical research facility focused on advances in combating diabetes, obesity and cardiovascular disease – Orlando's 'medical city' will also consist of:

- University of Central Florida's Burnett School of Biomedical Sciences;
- Cancer Research Institute of M. D. Anderson Cancer Center Orlando (CRI);
- Nemours Children's Hospital;
- Orlando VA Medical Center;
- Department of Veterans Affairs (VA) Medical Simulation Center for Excellence; and
- University of Florida Research Center.

This region's emerging biotechnology and life science sector has sprung from a renowned regional healthcare system, comprising some of the top hospital systems in the country – including Florida Hospital and Orlando Health. The sector has also spun off from a prominent agricultural base and the collaborative efforts of the region's established photonics and modeling & simulation sectors. Clinical trials of newly-developed medications are emerging as an important aspect of this sector as well.

Today, this Central Florida sector features:

- 150+ biotechnology and life science companies;
- 9,248 workers; and
- an estimated \$2.6 billion in earnings.

The biotechnology and life science sector is further augmented by several prestigious educational and research centers such as:

- University of Florida's Institute of Food and Agricultural Sciences (IFAS) and
- Central Florida Research Park, one of the country's top 10 research facilities.

Today, there is no limit to what we imagine possible. Wellness and personalized medicine are areas in which Metro Orlando is working to not only excel, but to differentiate this region as a leader – from the lab to the bedside.

## Why Metro Orlando?

The growing biotechnology and life science industry sector in Metro Orlando has benefited from cross applications with the region's prominent modeling, simulation and training, photonics and agriculture industries. From life-sized human patient simulators to laser surgery to genetic improvement of crops, elements of biotechnology are thread through multiple trades.

- Marketplace: There are 150+ biotechnology and life science companies located in Metro Orlando, generating revenues of \$2.6 billion. Areas of concentration include:
  - Research in diabetes, obesity and cardiovascular disease
  - Medical simulation and training
  - Evidenced-based clinical lab testing
  - Bioterrorism defense
  - Functional foods
  - Translational research
  - Plant pathology
  - Disease management
  - Telemedicine services
  - Specialty pharmaceuticals
- Workforce: The biotechnology and life science sector in Metro Orlando benefits from a steady flow of graduates from the region's well-regarded post-secondary institutions and vocational programs. Medical training conducted at the region's award-winning hospitals further adds to the workforce quality.
- Education: Metro Orlando's location in the center of Florida's Intelligence Triangle enables the region to draw on the skill and talent of graduates from the state's six top universities. Local teaching hospitals also offer valuable training courses in a variety of specialties.
- Industry Organizations and Involvement: Metro Orlando features support organizations devoted to raising the visibility of the biotechnology and life science industry by providing the resources necessary to contribute to the success of businesses in the sector.
- Incentives: The Metro Orlando community is focused on advancing the growth of all sectors of high tech industry in the region. To that end, grant funding and other financial incentives are available to attract new high tech businesses to the area and to enhance existing organizations.

## Overview & History

Metro Orlando's biotechnology and life science sector is developing a strong presence in the region with more than 150 companies involved in numerous facets of the industry such as:

- Groundbreaking research
- Clinical trials
- [Agricultural sciences](#)
- Innovative medical training

Two of the nation's largest hospital systems – Florida Hospital and Orlando Health – call Orlando home. But until a few years ago, Orlando was not a real 'contender' for the life science and biotech industry.

That changed in 2003, when Metro Orlando was 'short-listed' for the location of the Scripps Research Institute. While Scripps ultimately decided to locate in West Palm Beach instead, the region learned an important lesson: Metro Orlando had a great deal to offer but we needed a medical school to realistically compete for the development, expansion and relocation of life science companies.

Elected officials, community leaders and groups like the Metro Orlando Economic Development Commission (EDC) immediately began working together with University of Central Florida (UCF) President Dr. John Hitt to make this happen. And in March 2006, within a remarkably short time frame, the UCF College of Medicine was approved.

With the approval of the College of Medicine, Orlando became a realistic locational choice for life science companies...and community leaders were working behind the scenes to prove this by luring the Sanford-Burnham Medical Research Institute to Orlando. When Sanford-Burnham announced their east coast expansion was to be in Orlando, the eyes of the life science community and the world turned to our region.

Shortly thereafter, a 'medical city' was born when M. D. Anderson Orlando's Cancer Research Institute, a Nemours Children's Hospital, Orlando Veterans Affairs Hospital and University of Florida Research Center all announced plans to establish facilities at Lake Nona's Science and Technology Park.

Within a short span of time, the dream of creating a world-class life science cluster was starting to take shape in Orlando. And this was not going unnoticed. The decision of the Burnham Institute to locate in Orlando generated unprecedented media coverage and overwhelming interest in Orlando as a life science destination.

With the growing promise of this sector, community leaders stepped forward to help the EDC recruit additional companies. Under the management of the Metro Orlando EDC, business and health industry leaders created *bioOrlando*, an organization dedicated to accelerating the growth of this industry in Central Florida. Since 2007, *bioOrlando* – a collaborative group of forward-thinking business leaders – has worked to position Central Florida as a premier life science and biotechnology business destination worldwide.

## Marketplace

A few years ago, a life science cluster was a dream for Orlando. Now, that dream is a reality as the Tavistock Group's Lake Nona development near Orlando International Airport is the home for an emerging 'medical city'.

With the 2006 announcements of a new University of Central Florida (UCF) College of Medicine and the Sanford-Burnham Medical Research Institute, Orlando was thrust upon the life sciences map.

Since that time, the Tavistock Group's Lake Nona – home to Orlando's 'medical city' – has been working on a master plan for the community bringing together the best of the best in everything. In addition to the UCF College of Medicine and the Sanford-Burnham Medical Research Institute at Lake Nona, several other facilities have decided to co-locate in this 'medical city' including:

- **University of Central Florida College of Medicine** – UCF recently welcomed its inaugural class of 41 students, each of whom received full four-year scholarships from nearly \$7 million in community donations – an unprecedented move. The Burnett School of Biomedical Sciences is an integral part of the College of Medicine.
- **Sanford-Burnham Medical Research Institute at Lake Nona** – Teams of scientists who study diabetes, obesity, and cardiovascular disease work in a state-of-the-art 175,000 square-foot institute. The Sanford-Burnham Medical Research Institute at Lake Nona is committed to conducting fundamental and translational research and is supported by almost \$40 million of grant funding. Within 10 years, the institute will employ over 300 scientists and support personnel.
- **Cancer Research Institute of M. D. Anderson Cancer Center Orlando (CRI)** – By relocating its current facilities to Lake Nona's 'medical city', CRI will partner with the UCF College of Medicine on research projects and some of the center's doctors will serve as faculty members.
- **Nemours Children's Hospital** – Scheduled to open in 2012, Nemours' specialized hospital for children will be the central hub of a 60-acre pediatric health campus featuring a children's clinic, emergency department, diagnostic and ambulatory programs, education centers and research programs.
- **Orlando VA Medical Center** – This \$600 million, state-of-the-art facility due to open in 2013 will increase accessibility to healthcare for approximately 400,000 Central Florida veterans and will be the first VA hospital built in the United States since 1995.

**Department of Veterans Affairs (VA) Medical Simulation Center for Excellence** – Located at the new Orlando VA Medical Center, this center will be the nationwide training and planning home for the VA's new medical simulation system, which will allow VA employees to improve care and treatment for veterans across the country.

- **University of Florida Research Center** – This 100,000-square-foot research facility will be shared with the Burnham Institute and will enable the state's largest university to have direct collaboration opportunities with Burnham's top scientists.

## Workforce

As Metro Orlando cultivates its reputation as a high tech hub, the employee base continues to grow with educated, technically trained workers. The biotechnology and life science sector in Metro Orlando accounts for approximately 9,248 jobs in the region. With the region's emerging 'medical city', Orlando has the right formula for growth for biotechnology and life science companies. By year 10 of operation, it's expected that Orlando's life sciences cluster will create 30,000 jobs and \$7.6 billion in economic impact.

The sector is able to draw on the graduates from a number of highly-regarded research universities and institutions as the region is strategically positioned in the heart of the state, including:

- University of Central Florida
- University of Florida
- Florida State University
- University of Miami
- University of South Florida
- University of North Florida
- Florida Institute of Technology

The University of Central Florida's College of Medicine is set to become the nation's premier medical school born in this century. As a new medical school, the College of Medicine offers leadership opportunities and financial support to students in the charter class that are not available at any other medical school. UCF's M.D. Program allows students to prepare for careers in every discipline of medicine and to focus on an individualized area of study or research.

In addition to the individualized program, the basic sciences are integrated with the clinical sciences where each student can choose to train in many of the major specialty hospitals in the Orlando area. Training in both mock and live patient situations will be part of the program from day one.

The Florida State University College of Medicine Regional Medical School Campus – Orlando provides third- and fourth-year clinical training at regional medical school campuses around the state through affiliations with local physicians, ambulatory care facilities and hospitals. Here, students complete rotations in:

- family medicine
- internal medicine
- pediatrics, surgery
- obstetrics-gynecology
- geriatrics
- psychiatry
- emergency medicine

Based in Metro Orlando and a part of the University of Florida's Institute of Food and Agricultural Sciences (IFAS), Mid-Florida Research and Education Center (MREC) conducts research in the biological, physical, economic and social sciences through partnerships with public and private organizations. The (MREC) offers undergraduate and post-graduate degree programs intended to develop knowledge in:

- Agriculture
- Human resources
- Natural resources
- Life science

The region's community colleges and vocational training schools have responded to the expansion of the biotechnology and life science sector with programs created to prepare students for careers in the industry.

Additionally, Metro Orlando's prominent healthcare systems, Orlando Health and Florida Hospital, provide residency, clerkship and degree programs to medical students and continuing education on the latest healthcare advances to the region's healthcare professionals that further strengthen the workforce.

## **Education**

Members of academia and private business in Metro Orlando work closely together to advance the biotechnology and life science sector. Educational institutions develop programs and facilities that match the depth and variety of the industry.

### **[Lake-Sumter Community College \(LSCC\)](#)**

LSCC offers associate's degrees in pre-majors including biology, chemistry, nursing, physics, pre-pharmacy, pre-professional health and emergency medical services.

### **[Florida State University College of Medicine](#)**

Florida State University College of Medicine operates a regional campus in Metro Orlando with third and fourth year medical school students receiving clinical training through affiliations with local physicians, ambulatory care facilities and hospitals. Areas include: family medicine, internal medicine, pediatrics, surgery, obstetrics-gynecology, geriatrics, psychiatry and emergency medicine.

### **[Seminole State College of Florida](#)**

Students at Seminole State College of Florida receive cutting edge training in the health technology or environmental technology tracks and conduct hands-on research in the college's state-of-the-art science laboratory building. Seminole State College of Florida also offers associate's degrees in biology and healthcare professions, including nursing and respiratory therapy. The school has the region's only cell tissue culture lab, which provides for learning DNA extraction and separation techniques, harvesting cells and propagating plant tissue.

### **[University of Central Florida \(UCF\)](#)**

Part of the nation's 3<sup>rd</sup> largest university, the UCF medical campus at Lake Nona includes the Burnett School of Biomedical Sciences, a medical library and other UCF health sciences programs. The UCF College of Medicine recently welcomed 41 students in its inaugural class, all of whom received full four-year scholarships from nearly \$7 million in community donations. The program will eventually produce about 120 medical graduates each year and will capitalize on UCF's existing strengths in biomedical sciences, modeling and simulation, and optics and photonics. Other programs in materials science, psychology, chemistry, film and digital media, and nursing also will support the program. UCF offers a variety of Ph.D. programs in the life sciences, including chemistry and molecular biology and microbiology.

### **[University of Florida Institute of Food and Agricultural Sciences \(IFAS\)](#)**

IFAS, located near Lake County, is a federal, state and local government partnership dedicated to developing knowledge in agriculture, human and natural resources and the life sciences and to make that knowledge accessible to sustain and enhance the quality of human life.

### **[Valencia Community College \(VCC\)](#)**

VCC offers associate's degrees in Biology, Chemistry, Horticulture Science, Radiologic Science and Respiratory Care and provides programs for students interested in preparing for careers in Cardiovascular Technology, Diagnostic Medical Sonography and Emergency Medical Technology.

## Industry Organizations & Involvement

For emerging stage technology companies, Metro Orlando offers university-driven business incubators providing enabling tools, training and infrastructure to create financially stable high growth enterprises. Following are brief overviews of a sampling of organizations providing support to local industries with cross applications in the biotechnology and life science sector:

### [BIO](#)

The mission of BIO is to be the champion of biotechnology and the advocate for its member organizations—both large and small. Information regarding the national bio industry, as well as the BIO conferences, can be found on BIO's website.

### [BioFlorida](#)

BioFlorida, Florida's independent statewide bioscience organization, serves its members by providing the infrastructure to exchange information and ideas through industry specific programming, education, networking and legislative initiatives. BioFlorida focuses on creating and maintaining a favorable business and legislative environment; advancing the commercialization of research; and working with investors, private enterprise, government, academia and the financial/service sectors to further develop existing companies, launch start-up companies and attract new business to Florida.

### [Central Florida Research Park](#)

The hub for the region's extensive technology sector is Central Florida Research Park- one of the top 10 parks of its kind in the world. Located adjacent to the University of Central Florida (UCF), the facility brings academia, industry and government together to pursue collaborative research and technology commercialization.

### [Florida High Tech Corridor Council \(FHTCC\)](#)

A strategic approach to high tech economic development, the FHTCC was established to attract, retain, and grow high tech industry and to develop the workforce to support this industry in the 23-county service areas of the University of Central Florida, University of Florida, and University of South Florida. Through this partnership, the universities provide matching grants, workforce development, cultivation of technology, and a marketing program leveraging governmental, economic development organization and corporate budgets on a regional basis.

### [Metro Orlando Economic Development Commission \(EDC\)](#)

The Metro Orlando Economic Development Commission (EDC) is an organization that helps business. The EDC is dedicated to meeting the needs of today's industries and creating a competitive economic climate where businesses can thrive. To meet this goal, the EDC provides key services and support, which range from relocation and expansion expertise to export counsel to long-term planning with community partners. To attract new business investment, the EDC markets the Orlando region worldwide as a top location for business. In addition, the EDC works with local companies to assist them with expansion plans and other business concerns.

### [bioOrlando](#)

*bioOrlando* is comprised of business leaders from across the region who are focused on the development of Central Florida's biotechnology and life science industry. Led by the EDC, *bioOrlando* pursues initiatives that further accelerate this already fast-emerging sector. *bioOrlando* also serves as the Central Florida chapter of BioFlorida.

## [Tavistock Group / Lake Nona](#)

Tavistock Group is a global, private investment company that has grown to encompass a broad portfolio of interests in over 170 companies in 15 countries. Lake Nona, one of the company's major development projects, is a multi-faceted, 7,000-acre, master-planned community in the city of Orlando. The centerpiece of the community is a growing 'medical city' at Lake Nona's Science and Technology Park. This includes the University of Central Florida College of Medicine, Burnham Institute of Medical Research, new VA Hospital, Nemours Children's Clinic and University of Florida research center.

## [UCF Technology Incubator](#)

Seven incubators comprise the UCF Business Incubator program, providing early-stage tech companies with the tools, training and infrastructure to create financially stable, high-growth companies. Since opening in 1999, the Incubator network has helped 130 emerging companies (including 80 current clients) create over \$500 million in annual revenue and more than 1600 new jobs with an average salary of \$59,000.

## **Incentives**

Both the State of Florida and Metro Orlando offer attractive incentives to qualifying relocating and expanding companies. Elected officials have demonstrated their commitment to economic development through the adoption of incentive packages based on the needs of the company.

This assistance is provided on a case-by-case basis, based on each organization's particular needs including, but not limited to:

- job creation
- quality of wages
- capital investment

Florida and Metro Orlando's incentive programs have been developed conservatively and are aimed at business opportunities that deliver a clear return on investment. These opportunities typically have intense value-added economic impacts. Key programs include:

- tax reimbursements based on job creation and capital investment
- tax exemptions for targeted industries
- training grants
- competitive financing alternatives and infrastructure improvements

For more information, please visit the "Relocate & Expand/Incentives" section of the Metro Orlando EDC's website at [OrlandoEDC.com](http://OrlandoEDC.com), which provides a general overview of incentives offered to companies within Metro Orlando.

*For companies seeking incentives, the Metro Orlando EDC is an information portal and business advisor. Local and state governments benefit from the EDC's role as intermediary, which inevitably helps determine companies' eligibility and assures applications are fully completed and properly submitted.*

## **Company Profiles**

Metro Orlando's biotechnology and life science sector encompasses hundreds of organizations dedicated to research and development that is integral to improving quality of life. Whether their work is in extracting plant nutrients to produce vital vaccines or creating data management systems for medical records, these businesses contribute to the continued growth and success of the industry. Listed below are brief overviews of some of Metro Orlando's leading biotechnology and life science companies:

### **[Amaro & Associates, Inc.](#)**

Amaro & Associates, Inc. is a biopharmaceutical technology consulting firm that delivers quality assurance testing and validation, quality IT business processes and performance testing to ensure pharmaceutical manufacturing systems function properly through the development of its Total Validation Management (TVM) system. In a period of stronger pushes toward FDA regulation, this system consolidates multiple processes into one efficient program. The client is then able to create testable requirements, test plans, test scenarios and summary documents, which are not only less confusing but are accurate and complete.

### **[Axiom Healthcare Pharmacy, Inc.](#)**

Axiom Healthcare Pharmacy, Inc. is a nationwide, privately-held "Clinical Specialty Pharmacy" licensed and permitted to operate in all 50 states. Axiom Healthcare Pharmacy, Inc. specializes in providing physicians, patients, health plans and other healthcare providers with injectable and oral brand name products as well as compounded pharmaceutical products.

### **[Cardiovascular Sciences, Inc.](#)**

Cardiovascular Sciences, Inc. is a biotech company focused on the development of innovative medical products. The company is currently developing proprietary technology for the prevention of post-surgical adhesions as well as patented methods for preventing blood clot formations on medical devices and for treating patients suffering from cardiac trauma, such as ischemic reperfusion injury, heart failure, and bypass surgery.

### **[Cognoscenti Health Institute](#)**

Cognoscenti Health Institute is an evidenced-based clinical laboratory based in the Central Florida Research Park, adjacent to the University of Central Florida in East Orlando. Cognoscenti delivers on-site state-of-art diagnostic testing and professional interpretive services to community physicians, hospitals and the general population and offers faster turn-around time and consultation support via advanced information technology. Cognoscenti's 6,500 square-foot facility houses a high-tech clinical laboratory offering over 900 tests of interest and value to referring physicians and patients, more than 250 of which are performed on-site.

### **[CORD:USE](#)**

Founded by obstetricians who make blood stem cell products more readily available, CORD:USE Cord Blood Bank's program at Orlando Winnie Palmer Hospital for Women and Babies is utilizing umbilical cord blood – the most readily available source of stem cells – to help save lives. CORD:USE collaborates with hospitals nationwide to provide mothers with the opportunity to donate their babies' umbilical cord. This partnership satisfies their mission to create large, ethnically diverse inventories of cord blood stem cell units, which continues to improve the odds of survival for patients in need of a stem cell transplant.

### [CuraScript, Inc.](#)

CuraScript, Inc., the nation's largest privately-held specialty biotech pharmacy services company and a subsidiary of Express Scripts, combines high-tech distribution capabilities and clinical services to provide specialty injectable medications to individuals requiring complex, high-cost treatment. Recognized as an industry leader in managing care for patients with chronic illnesses, CuraScript employs over 2,500 team members and their state-of-the-art dispensing facility is headquartered in Orlando. Office and clinic-based physicians are the primary customers of their distribution services which provide integrated delivery solutions to safely and consistently distribute pharmaceuticals and medical supplies. CuraScript has a network of satellite distribution pharmacies, including a hemophilia center of excellence, and several infusion centers located across the United States.

### [Emergency Medicine Learning & Resource Center \(EMLRC\)](#)

Orlando-based Emergency Medicine Learning Resource Center (EMLRC) provides pre-hospital emergency care providers with the medical training necessary for disaster situations. The company's Mobile Emergency Simulation Lab (SimLab) is a motor coach designed to resemble a simulated ER and ambulance, allowing first responders to train in a realistic environment. The simulation lab is on the road five days a week visiting hospitals, EMS agencies and fire departments. EMLRC is the first mobile simulation lab in the country. The center also conducts research in the areas of disaster management, emergency medicine and public health.

### [Florida's Blood Centers](#)

Florida's Blood Centers (FBC), a not-for-profit organization, is the sole supplier of blood and blood products to 70 healthcare facilities in a 21-county area. With its 875 employees they are able to provide more than 360,000 units of blood and blood products each year donated entirely by volunteers. FBC remains the largest blood bank in Florida and the fourth largest independent blood bank in the nation. In addition to supplying blood and blood products, FBC offers HLA tissue matching, bone-marrow donor registration and a full-service tissue and eye bank.

### [Florida Hospital](#)

Florida Hospital is an acute-care health care system that is part of the comprehensive network of hospitals of the Adventist Health System. It is the largest private, not-for-profit hospital and is the oldest and largest health care system in Central Florida. Florida Hospital offers a wide range of health services for the entire family, including cardiology, neurology, diabetes, and women's medicine.

- As the first of its kind in Central Florida, the **Nicholson Center for Surgical Advancement** is a premier center for hands-on surgical instruction. The prime objective is to develop and disseminate cutting edge surgical knowledge and techniques to the global surgical community through state-of-the-art teleconferencing technology. Participants perform minimally invasive surgical procedures at one of nine state-of-the-art endoscopically equipped stations.
- The **Global Robotics Institute** is a world class multi-specialty surgical program comprised of leading urologic, gynecologic, colorectal, and cardiac physicians dedicated to providing superior patient outcomes through the use of robot assisted laparoscopic technology. The Global Robotic Institute is a destination program for both patients and physicians. Patients come from all over the world to their main facility Florida Hospital Orlando and their resort style campus Florida Hospital Celebration Health for the latest surgical treatment options. Nearly 7,000 international and domestic physicians receive training on the latest surgical treatments at Florida Hospital's Nicholson Center for Surgical Advancement each year.
- Scheduled to open in 2012, the **Translational Research Institute for Metabolism and Diabetes Biorepository**, a partnership between Florida Hospital and Sanford-Burnham Medical Research Institute at Lake Nona, will focus on changing the way diabetes and obesity research is conducted and make it possible to deliver results faster for patients. The facility will serve as the gateway to Florida Hospital's upcoming "Health Village" at their main campus.

## **GENICON**

GENICON is recognized as an emerging leader in the design, production, and distribution of patented surgical instrumentation focused exclusively on laparoscopic surgery, a form of minimally invasive surgery. Founded in 1998 and based in Orlando, Florida, GENICON is a privately held firm in which several of its shareholders are surgeons who utilize their products. GENICON remains today as it originated: a company driven to meet the needs of modern-day healthcare through the harmonization of clinical needs and the economic demands of a global healthcare system.

## **Informed Care**

Informed Care provides disease management and telemedicine services to address the complications and costs of chronic illnesses and public health conditions. The delivery of services falls into two categories: the provision of case management services and the provision of software, networks and infrastructure to provide remote consultation and care to patients through caregiving providers or networks.

## **INTER BIO-LAB, Inc.**

INTER BIO-LAB, Inc. is an established international provider of superior reconditioned clinical diagnostic analyzers. The company strives to deliver high quality instruments, meet its customers' delivery schedules and keep up with technological advances. IBL's extensive partnerships allow the company to provide superior chemistry, hematology, coagulation, blood, gas and electrolyte analyzers at an excellent value. The company recently opened a new 36,500-square-foot facility in the heart of Metro Orlando. The facility features a high tech department with new technology and storage capabilities.

## **Nemours Children's Hospital**

Nemours Children's Hospital and Pediatric Health Campus is also under construction in Orlando's fast-emerging 'medical city' at Lake Nona. The 620,000-square-foot facility will include 95 beds, an 18-bay emergency department, a neonatal intensive care unit and departments specializing in complex childhood diseases. Scheduled to open in 2012, the hospital will be the central hub of a 60-acre pediatric health campus featuring a children's clinic, emergency department, diagnostic and ambulatory programs, education centers and research programs. The Nemours Children's Hospital is expected to pump \$400 million into the Central Florida economy and eventually create 2,600 new jobs

## **Orlando Health**

Orlando Health is one of Florida's most comprehensive private, not-for-profit healthcare networks. A community-based and supported hospital organization of facilities, they are dedicated to serving the needs of our region. Comprised of Orlando Regional Medical Center, Arnold Palmer Hospital for Children, Winnie Palmer Hospital for Women and Babies, M. D. Anderson Cancer Center Orlando, Cancer Research Institute, Orlando Health Foundation, plus more.

### **M. D. Anderson Cancer Center Orlando**

M. D. Anderson Cancer Center Orlando uses basic and translational research to understand how tumors grow and spread, creating more effective treatments for cancer patients. More recently, the Cancer Center has partnered with the University of Central Florida to advance cancer research in Orlando. UCF's new Health Sciences campus at Lake Nona allows for a 30,000-square-foot space for the Cancer Center in the new Burnett Biomedical Sciences Building scheduled for completion this year. Part of the Orlando Regional Healthcare System, M. D. Anderson Cancer Center is the first and largest affiliate of the world-renowned University of Texas M. D. Anderson Cancer Center. M.D. Anderson works to create superior programs in multidisciplinary patient care, prevention, research and professional and community education. They have achieved significant improvement in the quality of cancer care in Central Florida, providing care to cancer patients from diagnosis through all phases of treatment and follow up

### **Orlando VA Medical Center**

Scheduled to open in 2012 in Orlando's 'medical city' at Lake Nona, the Orlando VA Medical Center will be a 134-bed hospital that will bring the latest research and state-of-the-art medicine to 400,000 Central Florida veterans. This facility, the first VA hospital built in the United States since 1995, will pioneer cutting-edge technology in prosthetic limbs and bionic technologies for arms, legs, and eyes. The Center will also specialize in brain injury treatment, post traumatic stress disorder research and treatments in suicide prevention.

In addition, the Center will be the nationwide training and planning home for the VA's new medical simulation system – Simulated Learning Enhancement and Advanced Research Network (SimLEARN). A 35,000-square-foot facility, to be called the SimLEARN National Center, will bring physicians and other medical professionals from throughout the country to train in the latest medical simulation technology, including surgical robotics.

### **Ortheon Medical**

Headquartered in Metro Orlando, Ortheon is a development stage company currently working on commercializing its proprietary Teno Fix technology. Teno Fix uses an innovative soft-tissue anchor system and works to change the way tendons are repaired forever. Under a research agreement formed with the University of Central Florida (UCF), university biomedical engineering researchers will analyze new uses throughout the body for this revolutionary tendon repair system. UCF researchers will perform biomechanical testing, create prototypes and provide lab assistance and analysis relating to Ortheon's Teno Fix™ technology.

### **Rippe Health Evaluation**

The Rippe Health Evaluation is the only executive health program in the United States directed by a board-certified cardiologist. Because of both the quality and totality of its assessment program, the Rippe Health Evaluation has rightly been called "the finest high-touch, high-tech executive health assessment in the world." The Rippe Health Evaluation has been developed by Dr. James Rippe, internationally recognized for his fitness and lifestyle research and medicine, to meet a number of health and wellness needs. It incorporates the advantages of the finest diagnostic equipment and systems, as well as state-of-the-art medical technologies.

### **Sanford-Burnham Medical Research Institute at Lake Nona**

Sanford-Burnham is an early partner and anchor in the new medical city at Lake Nona in Orlando. In April 2009, teams of scientists who study diabetes, obesity, cardiovascular disease moved into a state-of-the-art 175,000 square-foot institute. The Institute at Lake Nona is committed to conducting fundamental and translational research and is supported by almost \$40 million of grant funding. Within 10 years Burnham at Lake Nona will employ over 300 scientists and support personnel. The facility is one of the largest LEED certified scientific buildings in Central Florida. Burnham's presence in Orlando is expected to be a catalyst for future growth of biotech and life sciences in metro Orlando and a key contributor to diversification of the economy.

### **Science Applications International Corporation (SAIC)**

SAIC life sciences division supports government and commercial customers in all phases of drug development – discovery, pre-clinical and clinical development and operations and compliance. Programs supported range in scope from basic and translational research to advanced development, operational excellence, IT systems integration and regulatory approval of drug, biological and device products.

### **Triad Isotopes**

Triad Isotopes, Inc., headquartered in Orlando, works to advance the diagnosis and treatment of disease through the use of radiopharmaceuticals and is the fastest growing radiopharmaceutical company in the nation. The company has brought together 21 of the best independent facilities serving the nuclear medicine industry. The pharmacies, doctors and hospitals under the Triad Isotopes ownership umbrella are given the funding, corporate resources, and quality assurance standards vital to delivering growth, superior service and innovations in the nuclear medicine industry.

### **UroSolutions, Inc.**

UroSolutions, Inc. is a medical technology company that manufactures and distributes urological medical devices. The company's revolutionary technologies include a patented hydrodynamically bladder management system, as well as other products promoting the health, comfort, convenience and safety of urinary care patients.

### **Valensa International (formerly U.S. Nutraceuticals LLC)**

Valensa International is a science-based developer and manufacturer of high-quality ingredients for supplemental human nutrition. Today, the company is the leading vertically integrated global supplier of saw palmetto and astaxanthin products. Additionally, Valensa manufactures a line of high value botanical extracts including cranberry seed, ginger, rosemary, oregano, valerian and other botanical ingredients.

### **VaxDesign Corporation**

VaxDesign Corporation is an emerging biotechnology company that challenges disease differently; going beyond pathogen-oriented to immune-oriented science for creating and testing immunotherapies, they combine immunology with engineering to find practical solutions to complex biological problems. VaxDesign develops ex vivo models of human immunity that are functionally equivalent to the human system, and will predict human responses to pharmaceuticals and vaccines much better than existing approaches. Their models will provide a rapid and cost-effective solution and have the potential to save companies years of development time and millions of dollars of development costs. The company intends to become a leader in the field of immunotherapy and is dedicated to developing and commercializing their products and processes that harness the power of the immune system to treat a wide variety of diseases.

### **Virtual Reality Medical Center**

Virtual Reality Medical Center is accelerating Orlando's cutting-edge development work with computer-generated simulations. By implementing virtual reality, the company is able to treat mental-health disorders and train health-care providers, establishing veracity in the field of simulation psychotherapy. Components of the program feature sensational characteristics, such as visual, audio, motion and scent, and researchers can examine real-time results of the subjects' physical, emotional and psychological reactions.

### **Visions@work**

Visions@Work is a strategic provider of application outsourcing, product development and custom software development, integration and maintenance services that links e-services with backend systems for healthcare organizations worldwide. The company has a core focus on continuity of care, patient access, physician relationship management, patient clinical information management, electronic referrals, secure messaging and data analysis. The [Preferr](#) product is a web-based, interactive, intelligent collaboration solution that allows all care providers to automate the referral process, securely exchange patient clinical and contact information, track referrals, communicate real time and forecast referral patterns. This improved communication system between providers serves to address growing needs, improve the continuity of care and foster better patient care and patient/doctor relationships.