



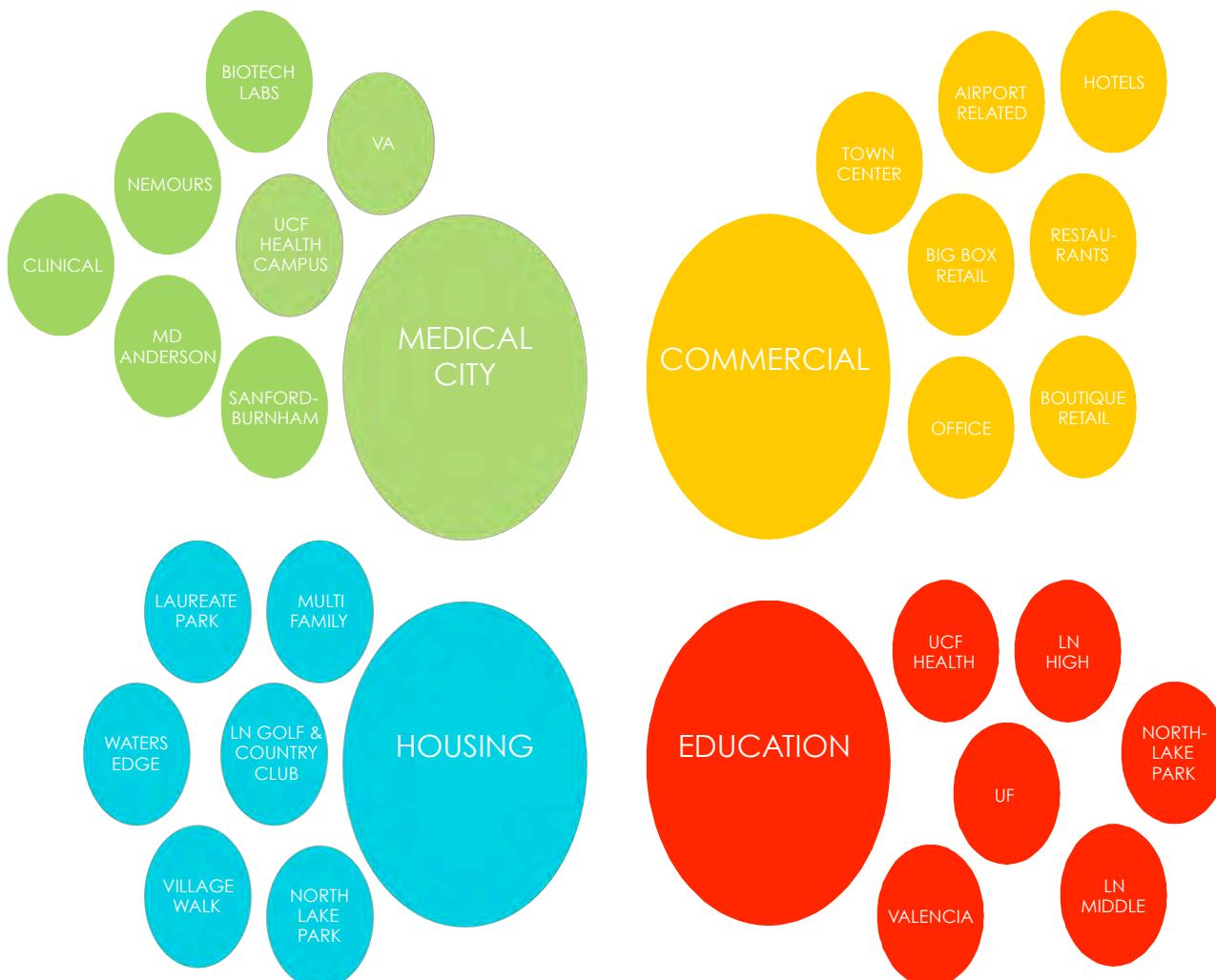
Accelerating Innovation in Central Florida

22 October 2012



# Development Update

# Lake Nona – Areas of Focus



## LEGEND

Residential



Education



Lake Nona M.



Commercial & Mixed Use



Trails



SCALE IN MILES

1

1/2





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NORTH ORLANDO

ORLANDO  
INT'L  
AIRPORT

NORTHLAKE PARK

LAKE NONA GOLF  
& COUNTRY CLUB



# JCF Health Sciences Campus





Sanford-Burnham Medical Research Institute



# University of Florida Research & Academic Center

# Nemours Children's Hospital



## FAST FACTS

- 60-acre campus
- 95-bed children's hospital
- Outpatient specialty clinics

# Nemours Children's Hospital





Orlando VA Medical Center



## FAST FACTS

- 65-acre campus
- 314 Bed Facility
- 1.2M square feet



# Lake Nona Middle School

Drill



# Lake Nona High School



Valencia College at Lake Nona

# Multiple Housing Options

- **NorthLake Park Apartments.** A 165-unit garden apartment community in NorthLake Park. Apartment rents start in the high \$800s/month.
- **Waters Edge** at NorthLake Park. A 429-home gated community within NorthLake Park. Townhome pricing starts in the \$160s.
- **Lake Nona Golf & Country Club.** Home to a Fazio-designed championship golf course, country club and executive custom housing. Home pricing averages at \$2M.
- **Watermark Apartments.** Construction on the 278-unit garden apartment community to begin in late 2012. Rents to start in the \$900s/month
- **VillageWalk at Lake Nona.** The 1,350-unit community features canals throughout leading to a clubhouse and amenity center. Home prices start in the low \$200s.
- **Laureate Park.** Lake Nona's newest neighborhood brings a focus on health and sustainability. Home pricing starts in the low \$200s.



# Lal rccrra Park



September 9, 2011

# Laureate Park



## FAST FACTS

- 2,600-home residential community
- Transitional architecture
- 20% less energy consumption

September 12, 2012



aureate Park

# Laureate Park Village Center



# Watermark Apartments



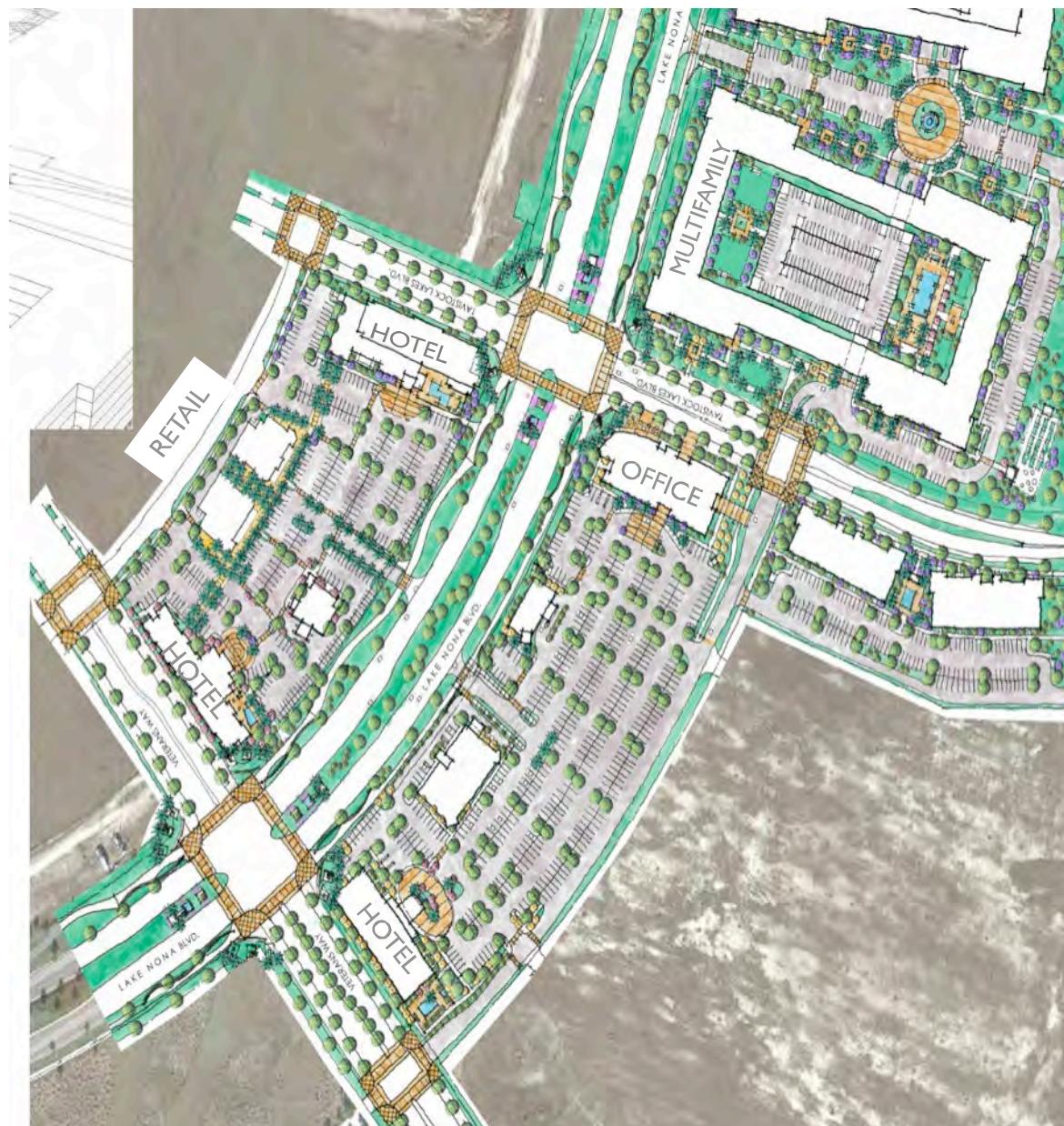


Lake Nona Plaza – Publix Center

# Lake Nona Town Center

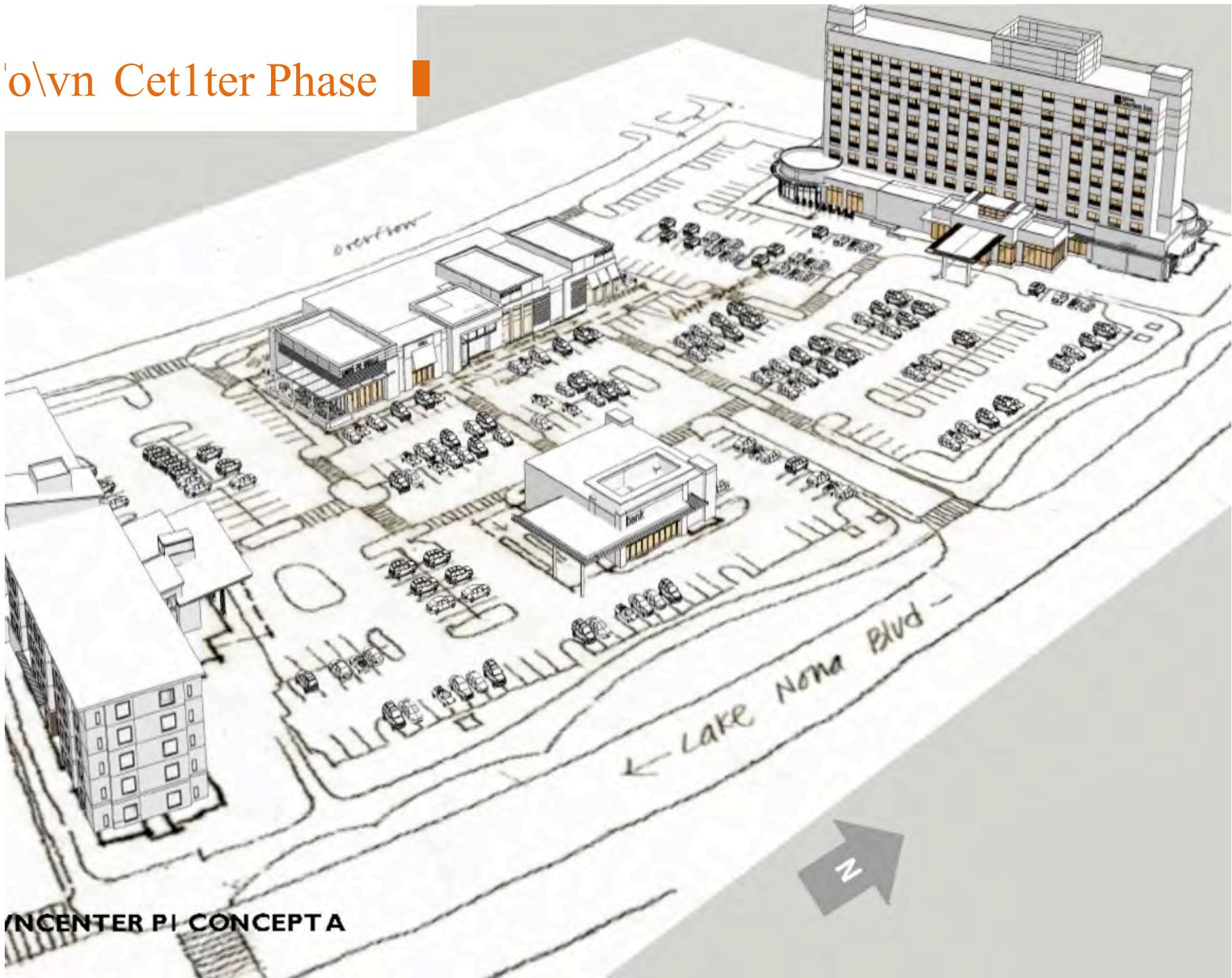


# Town Center Phase I



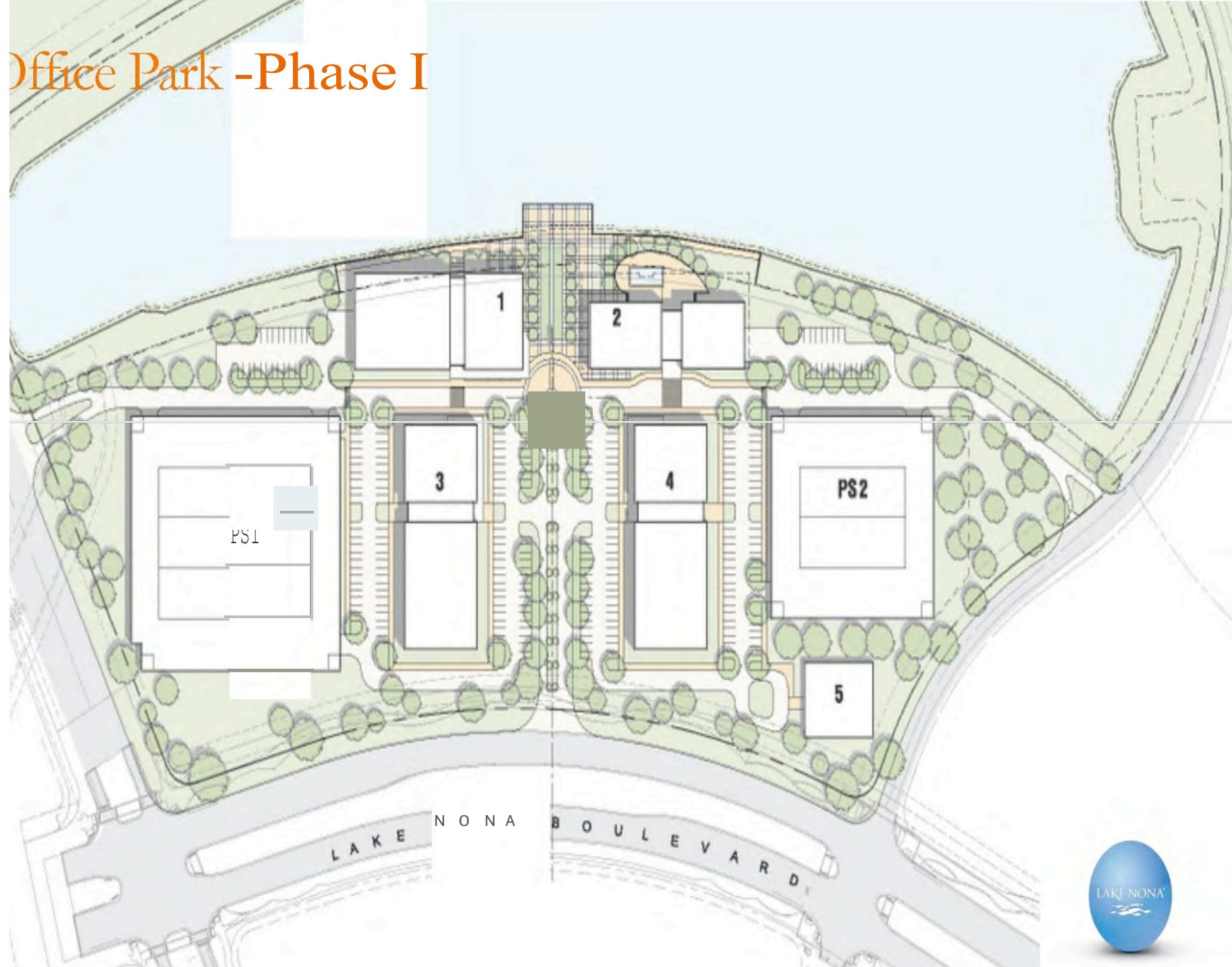
PLANNED PROGRAM (AS OF SEPTEMBER 2012)

# 'o\vn Cet1ter Phase



# Office Park





## Office Park -Phase I



# Office Park – Phase I



# Projected impacts to Orlando economy by 2017

	Milken Cluster (2006 study)	Future Cluster (arduin, laffer & moore 2008 update)	Current Committed Activity
<b>NUMBER OF JOBS</b>	+ 25,700	+ 30,300	<b>+ 16,200</b>
<b>TOTAL WAGES</b>	+ \$2.3 billion	+ \$2.8 billion	<b>+ \$1.5 billion</b>
<b>TOTAL ECONOMIC IMPACT</b>	+ \$6.4 billion	+ \$7.6 billion	<b>+ \$5.2 billion</b>





# Life Sciences Update

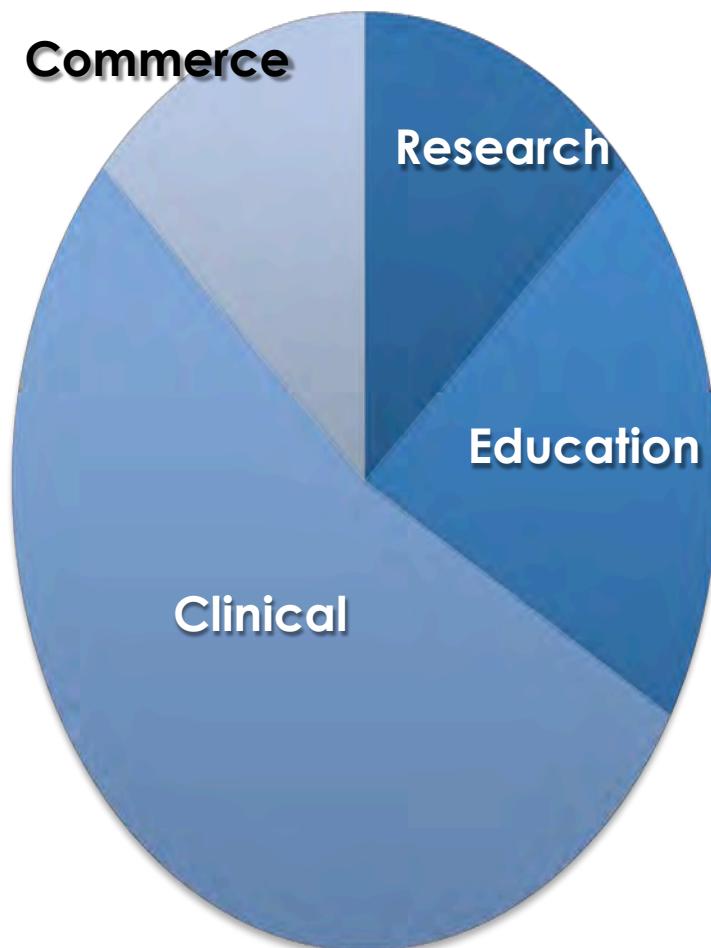
# Essentials of a Life Sciences Cluster



# San Diego Cluster



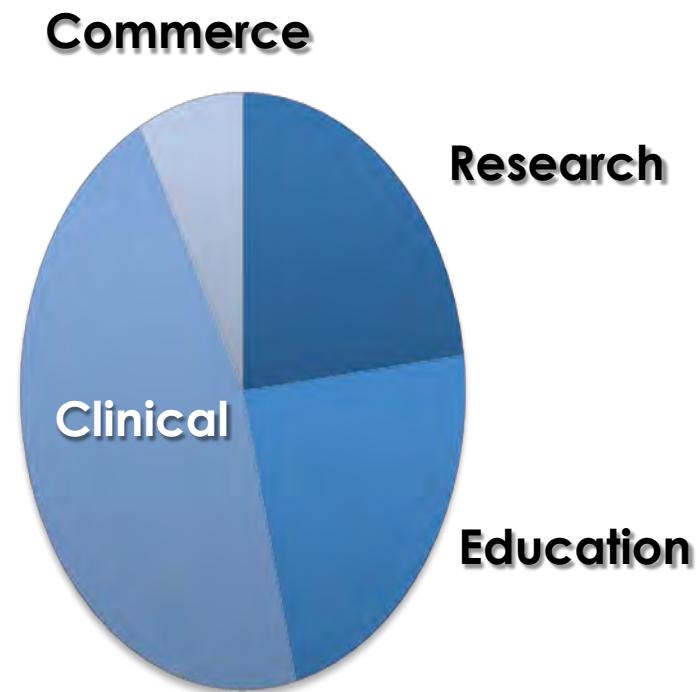
# Houston Cluster



# Boston Cluster



# Lake Nona Cluster



# Future Lake Nona Cluster



# Life Sciences Cluster – Value Chain



**right mix of institutions**

proximity to others  
long medical school



**top talent**

- technology/  
infrastructure
- other top scientists



**grant funding**

- collaboration
- state research funding

**Inc.  
500**  
**technology transfer**

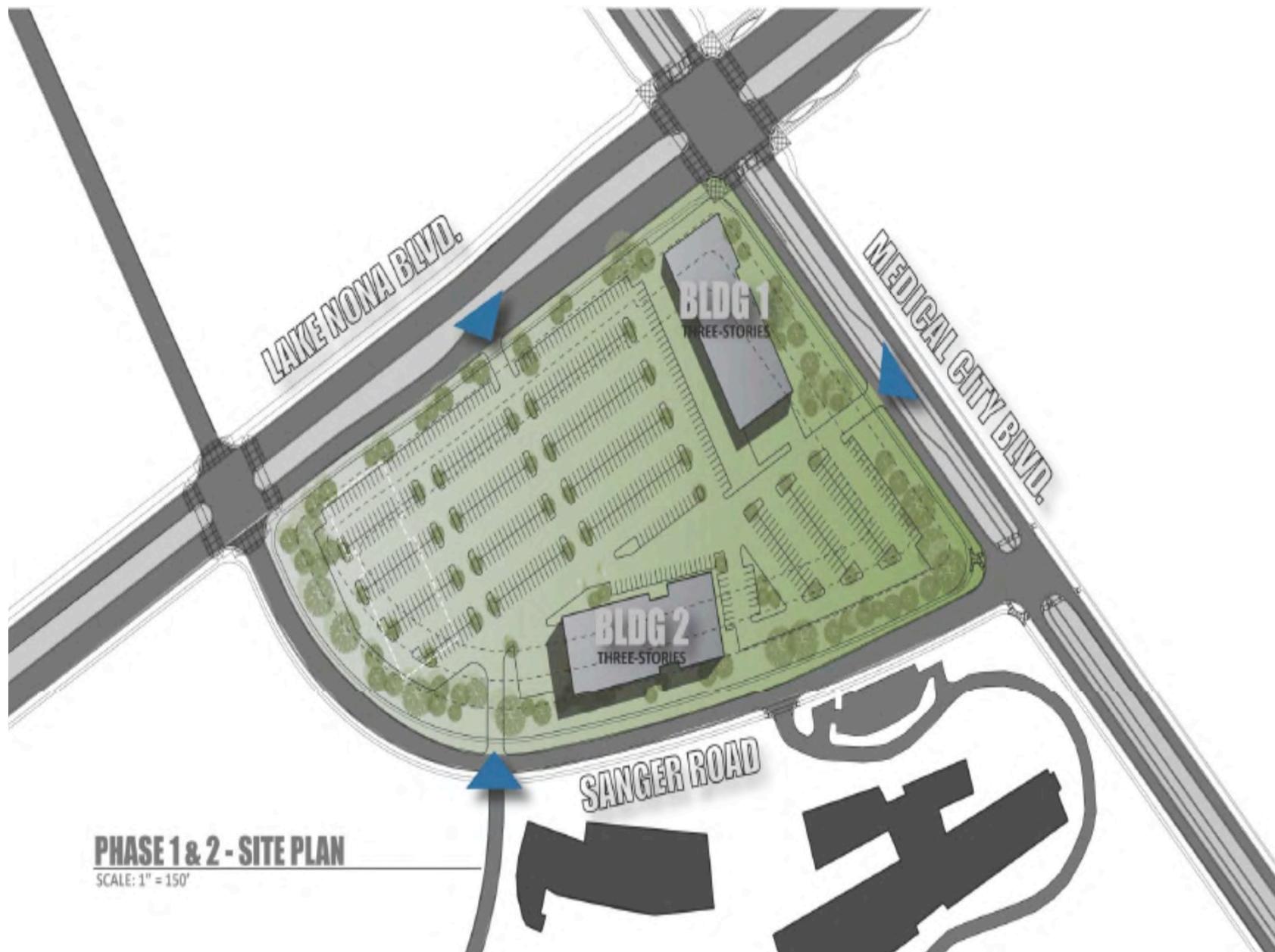
- entrepreneurs
- risk capital



**value and  
job creation**

- growth capital
- business density

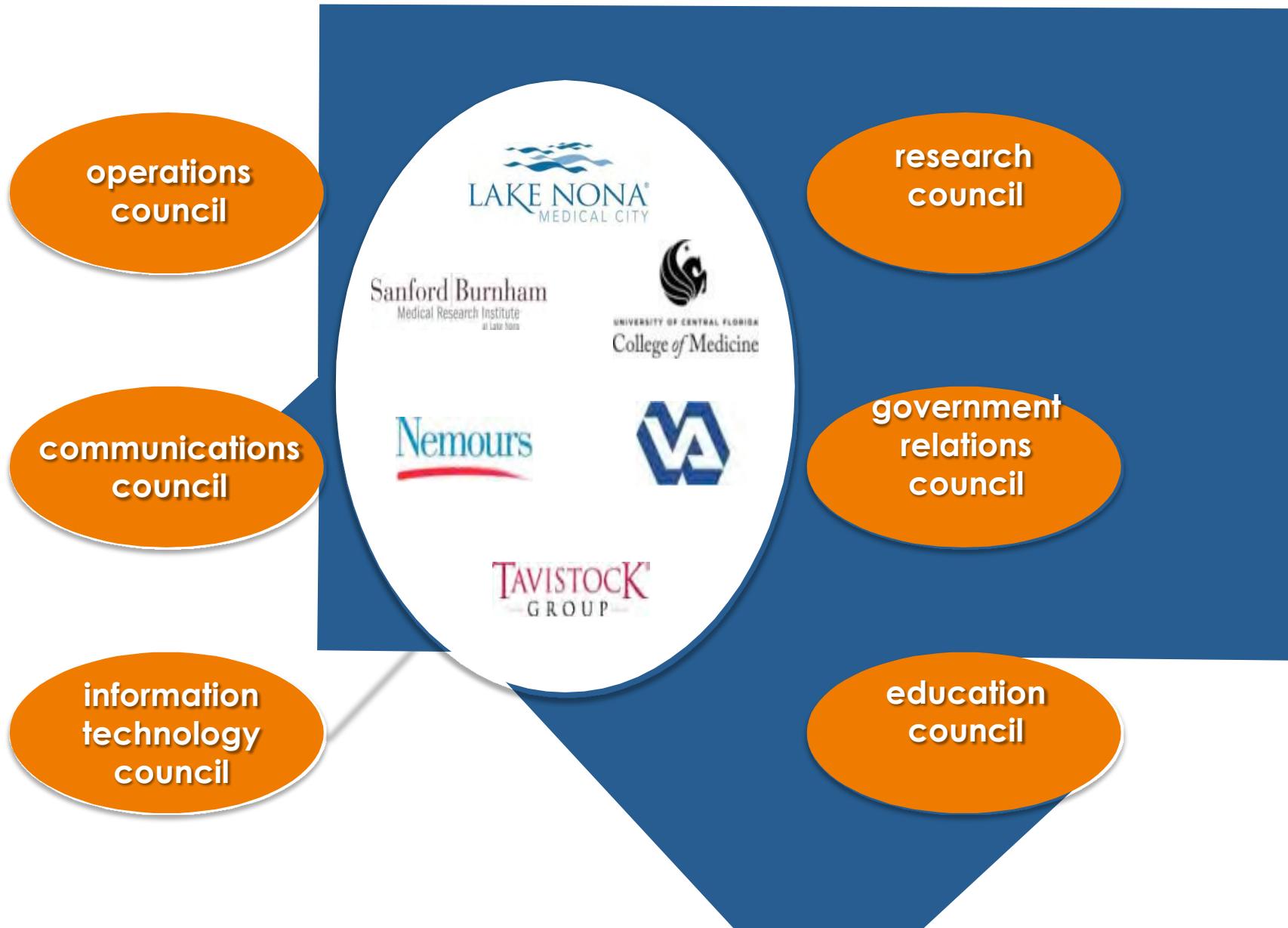
# Lake Nona Innovation Center



# Lake Nona Innovation enter



# Councils: Venues for Collaboration



# Collaboration Recognition



Amy C. Edmondson  
**Novartis Professor of Leadership  
and Management**



HARVARD | BUSINESS | SCHOOL

N9-813-022  
SEPTEMBER 9, 2012

AMY C. EDMONDSON  
SYDNEY KIBOT  
TIANA ZUZUL

## Designing a Culture of Collaboration at Lake Nona Medical City

Thad Seymour, President of the Lake Nona Institute, believed that process and governance decisions would be critical to Lake Nona's success. Seymour had joined the team to develop a 7,000-acre residential and research cluster in Central Florida following a successful career in healthcare and biotech. Like many involved in the project, he had been drawn to its potential to "move the needle" on important scientific, technological and sustainability advances. To realize the community's ambitious goals, Seymour knew that he would have to work effectively with a growing roster of partners across sectors and industries.

The Lake Nona community was spearheaded by Tavistock Group (Tavistock), an international private investment organization with a significant presence in Central Florida. The project aimed to develop a master planned community and innovation cluster focused on biomedical research, clinical care and medical education in a healthy, eco-friendly environment. Tavistock founded Lake Nona Property Holdings (Lake Nona) to develop the community and the nonprofit Lake Nona Institute (the Institute) to support this mission. By 2012, a diverse group of partners had moved onto plots of land at the development. A medical and translational research cluster, baptized "Medical City" by the local press, had risen from virtually nothing in 2006 to form a loose confederation of facilities funded by both public and private sector money. Nemours Children's Hospital (Nemours), the first new Veterans Affairs (VA) hospital to be built in decades, the Sanford-Burnham Medical Research Institute (Sanford-Burnham), the University of Central Florida's (UCF) new medical school, and the University of Florida Research and Academic Center (UF) were open or slated to open within months. Three neighborhoods had been built and residents had begun to purchase homes in a brand new one. Lake Nona was well on its way to becoming a "living laboratory."<sup>1</sup>

One of Lake Nona's primary goals was to encourage innovation by "convening" the diverse organizations in the cluster, and the Lake Nona Institute was the "glue" that tied them together. One of Seymour's first initiatives was organizing a set of councils for the leaders of organizations to discuss ways to collaborate on technology, communications, education and operations. These gatherings allowed members of the nascent community to keep each other abreast of individual developments and to pursue ideas that could benefit from collaboration – from recruiting to PR. Among members of the Leadership Council, which comprised the heads of the major tenants listed above, conversations often focused on strategic decisions that would affect them all: given finite time and resources, how much should Lake Nona and its partners invest in sustaining collaboration over a long-term project? How should they measure the results?

Professor Amy Edmondson, Research Associate Sydney Kibot and Doctoral Candidate Tiana Zuzul prepared this case. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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# Innovation Ecosystems of the Future

## The New York Times

THOMAS L. FRIEDMAN

Published: January 3, 2012

The I.T. revolution is giving individuals more and more cheap tools of innovation, collaboration and creativity — thanks to hand-held computers, social networks and “the cloud,” which stores powerful applications that anyone can download. And the globalization side of this revolution is integrating more and more of these empowered people into ecosystems, where they can innovate and manufacture more products and services that make people’s lives more healthy, educated, entertained, productive and comfortable.

The best of these ecosystems will be cities and towns that combine a university, an educated populace, a dynamic business community and the fastest broadband connections on earth. These will be the job factories of the future.

In the **1800s**, it was access to abundant flowing **water and raw materials**. In the **1900s**, it was access





ORLANDO  
INT'L  
AIRPORT

NORTHLAKE PARK

LAKE NONA GOLF  
& COUNTRY CLUB

LAKE NONA  
TOWN CENTER

VillageWalk

nham  
stitute  
and more

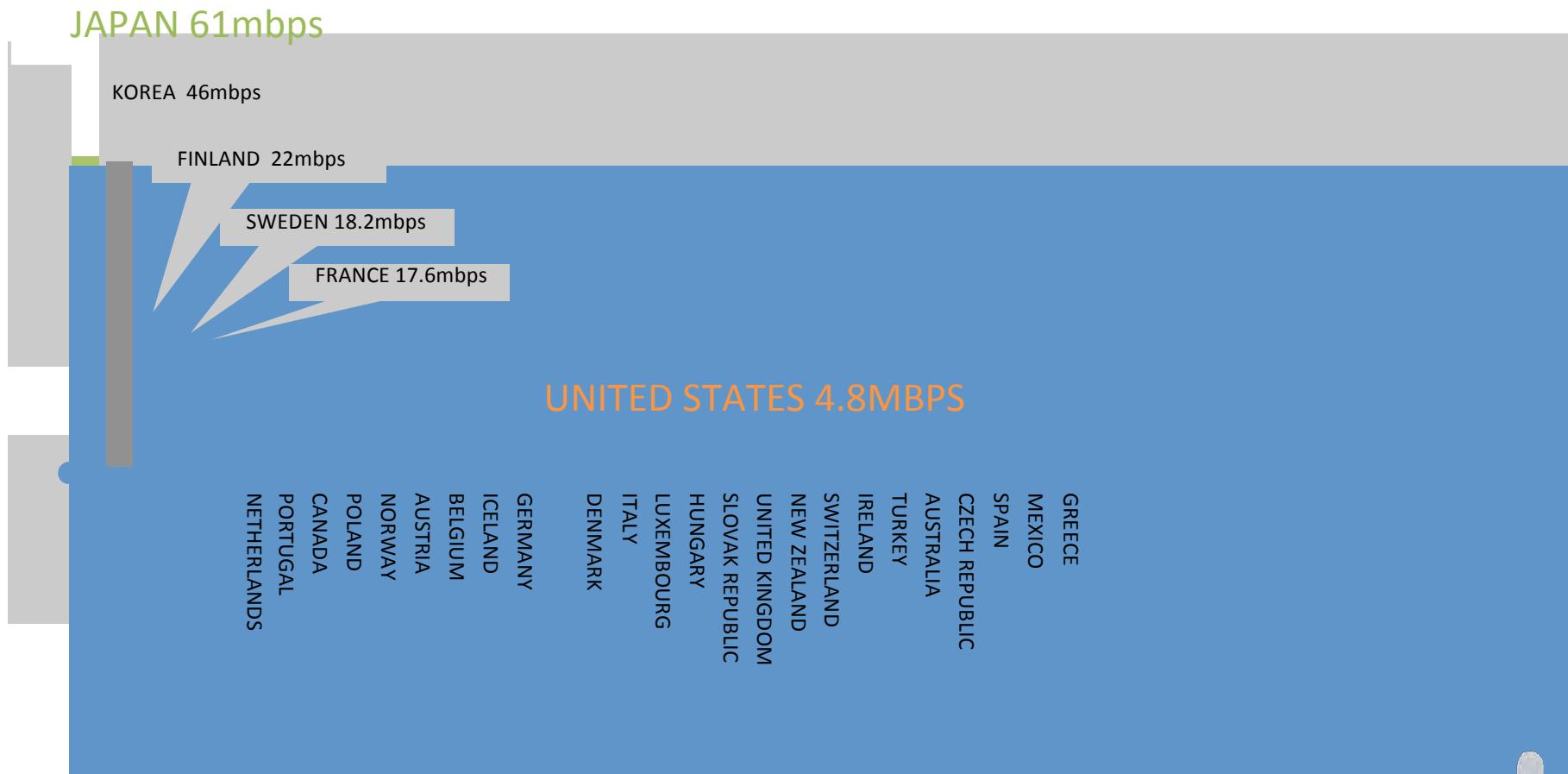
MD ANDERSON  
CANCER CENTER  
ORLANDO  
Memorial Sloan Kettering Cancer Center  
ORLANDO HEALTH

Nemours



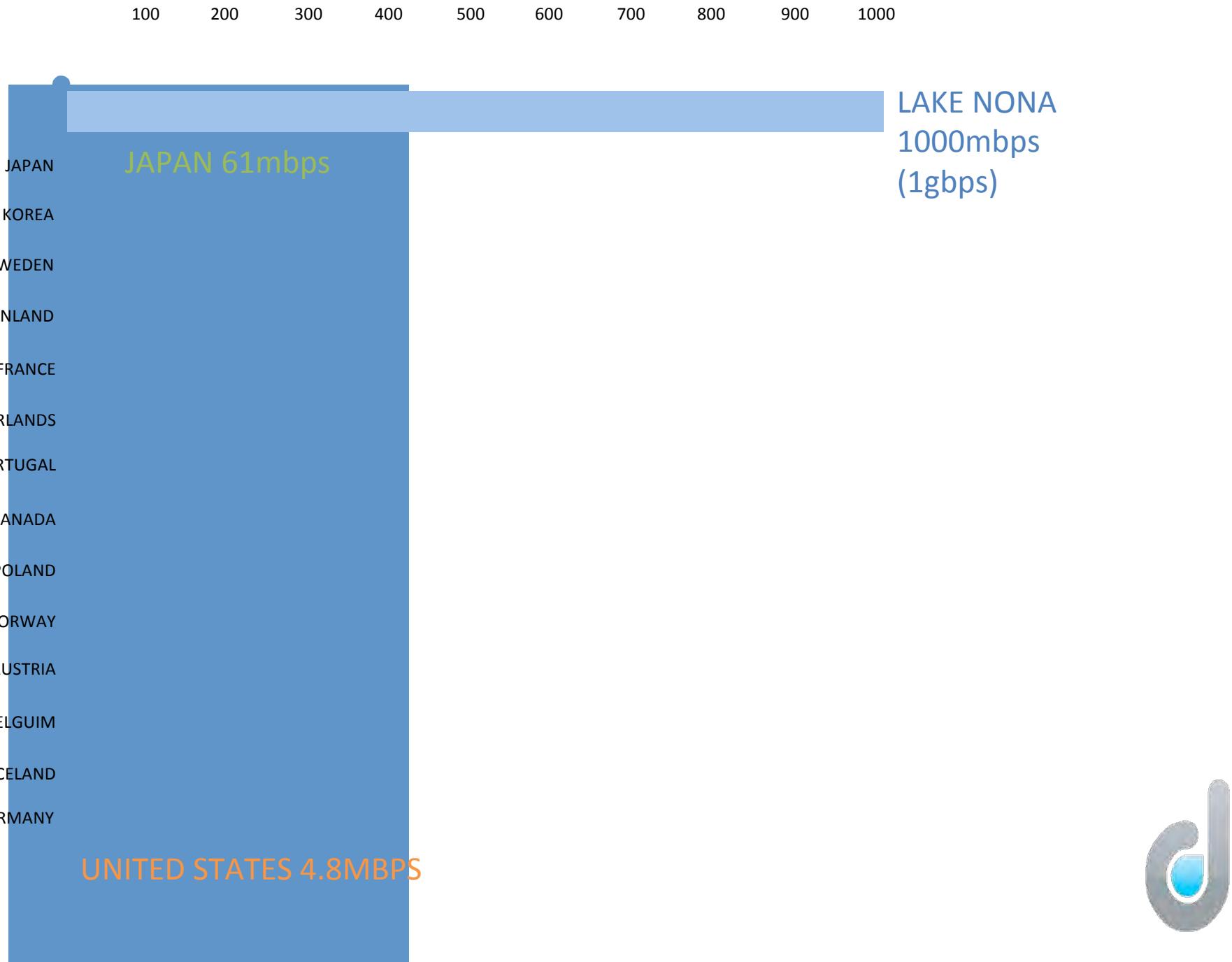
Our technology platform has allowed us to integrate systems across the community allowing applications to bridge residential, commercial, retail, education and medical.

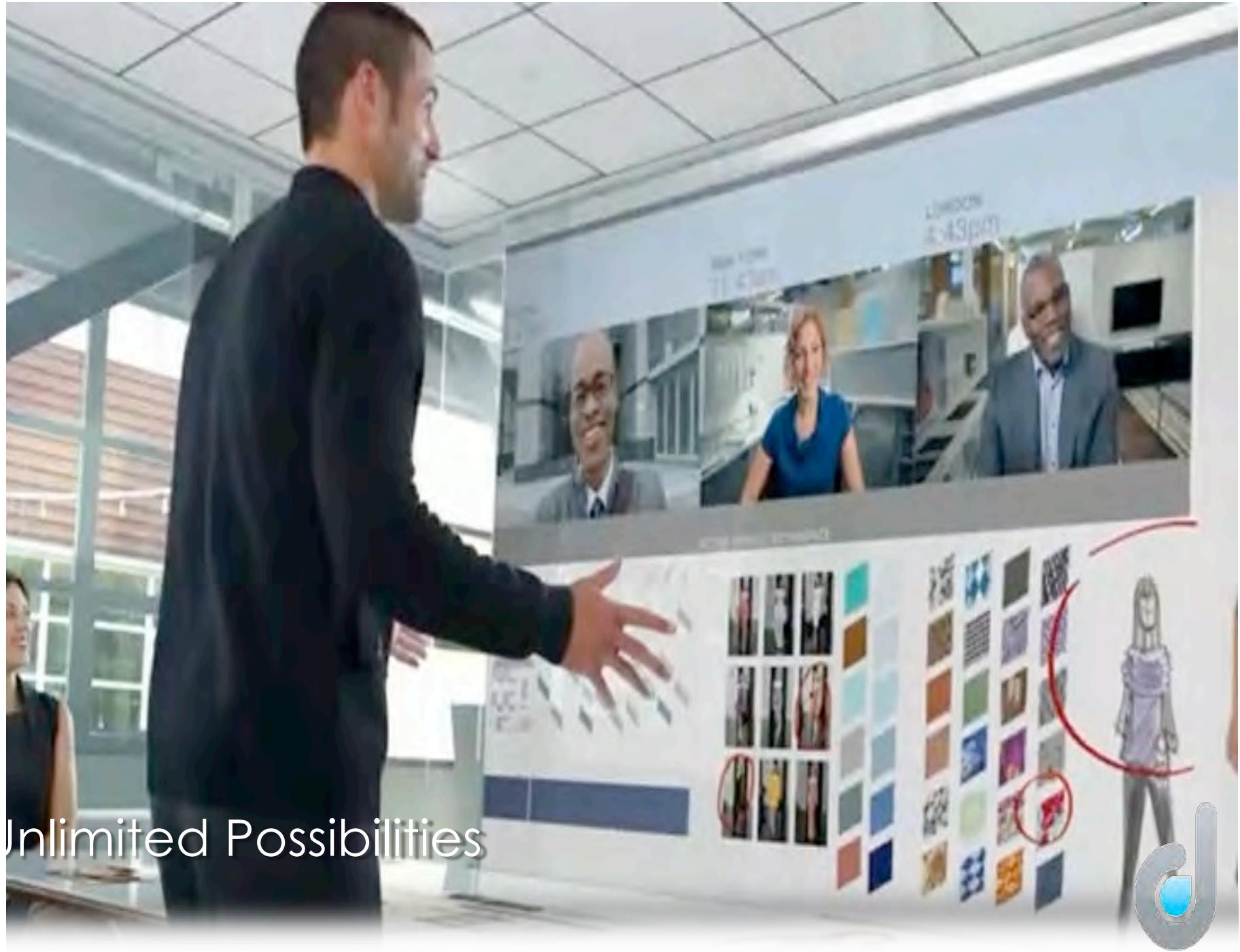
# Global Landscape



Source: Internet World Stats Broadband PenetraRon







Unlimited Possibilities





New Models of Learning





Healthcare Promises Fulfilled

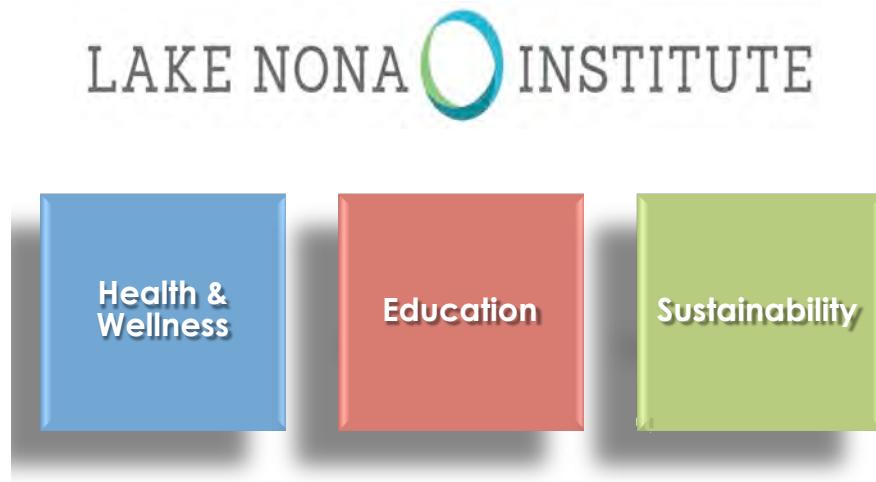


The Future

NEXT EXIT



# Making a Difference Beyond our Borders



Committed to **incubating**, **activating**, and **measuring** the impact of innovative technologies and programs that can become global models for building **healthy**, **sustainable** and **inspired** communities.



# LAKE NONA INSTITUTE

## Community Engagement



## Research Programs



Wellness & Prevention, Inc.  
a **Johnson & Johnson** company

## Knowledge Sharing





**October 23 - 25**

"Accelerating the Impact of Health Innovation"

125 CEO's, Academic Leaders, Healthcare Executives and Public Officials

20 national speakers

3 major partner announcements

Creating new ambassadors

A detailed agenda for the Impact Forum 2012. The page is divided into two main sections: "WEDNESDAY, OCT. 24" and "TUESDAY, OCT. 23".

**WEDNESDAY, OCT. 24**

**AGENDA & SPEAKERS**

**Lake Nona Impact Forum**  
PRESENTED BY

Reception Sponsor:

The agenda includes several sessions:

- WEDNESDAY, OCT. 24**: Includes sessions like "Partnerships Can Challenge Us", "How Businesses, in the Short Run, Answer, It?", "What Be Surprised About?", "Imperative", "Healthcare for Wellness: Is", "Transportation", "Connected", "Vice President Applied", and "Lake Nona Impact Forum".
- TUESDAY, OCT. 23**: Includes sessions like "Event registration begins at The Ritz-Carlton Orlando, Grande Lakes", "Transportation provided to Lake Nona Medical City, UCF College of Medicine", "Opening Reception", "Welcoming remarks from The UCF College of Medicine", "Tom Gentile, President and CEO, GE Healthcare Systems", "The Honorable William H. Frist, M.D., Senator", "John Chambers, CEO, Cisco", and "Transportation provided to The Ritz-Carlton".

At the bottom, there is a footer with the text "2012 | Lake Nona Impact Forum" and the number "3".



# **Sanford...Burnham Update**

## **Orlando's Developing Life Sciences Innovation**

Daniel P. Kelly, M.D.  
Scientific Director  
October 22, 2012





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

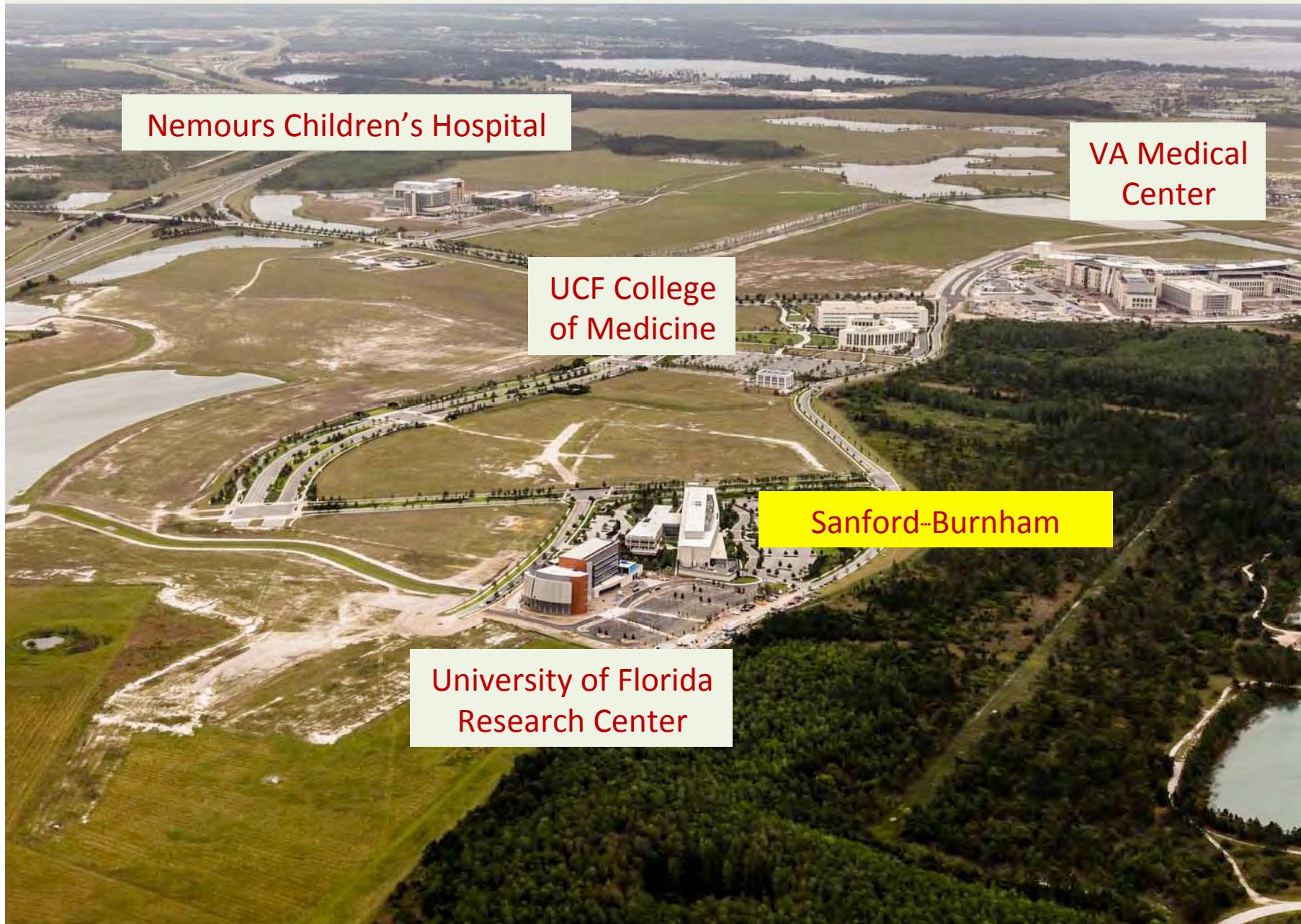
First Medical City facility to open (April 2009)

75,000 sq ft facility

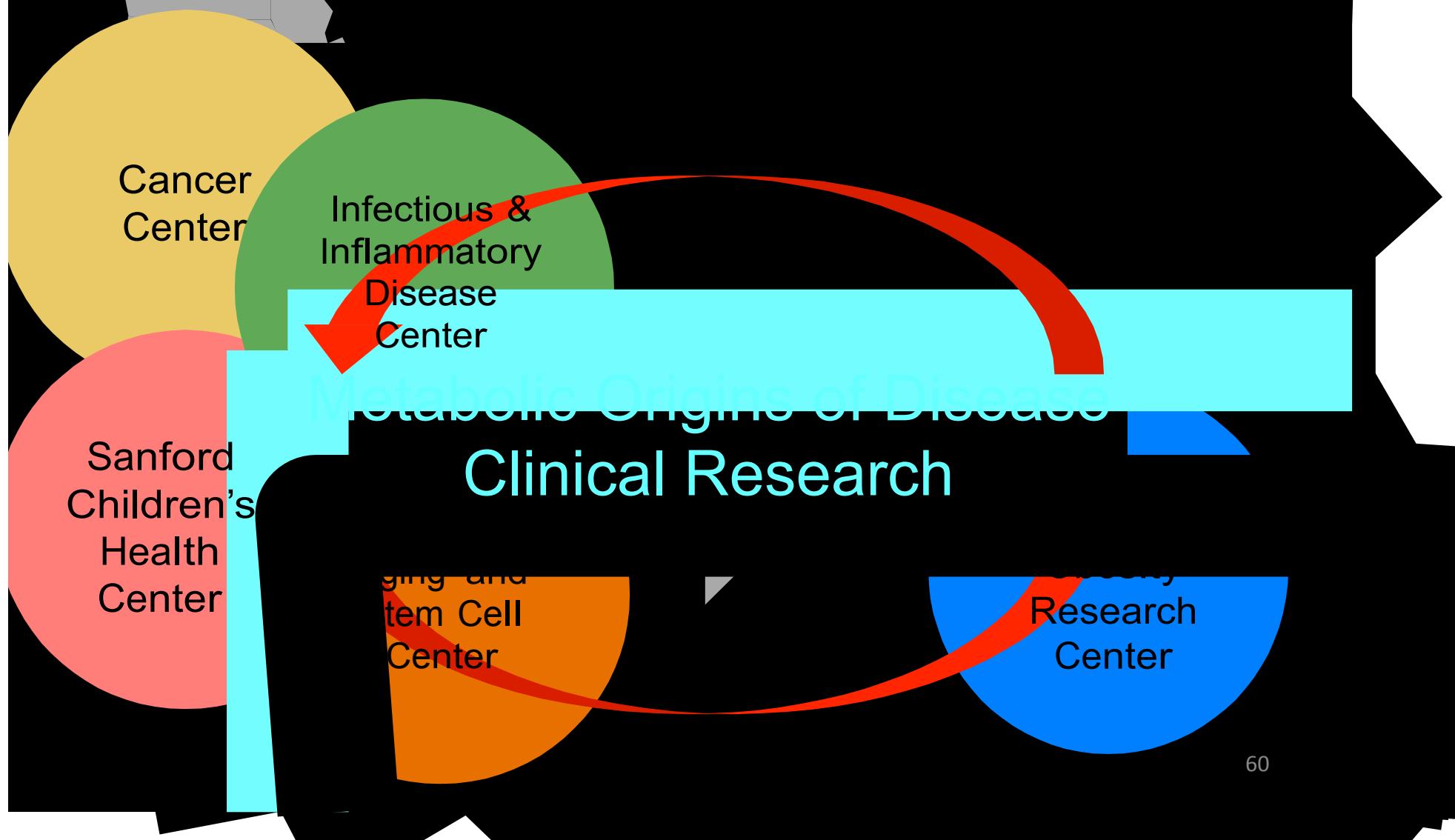
argest GOLD LEED independent scientific facility in Florida



# Medical City at Lake Nona

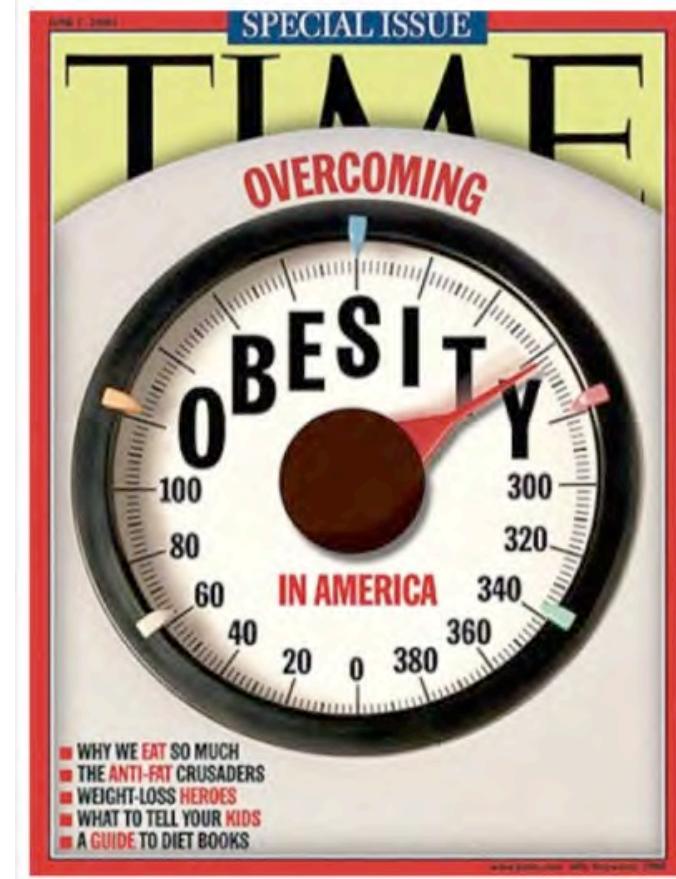


# Diabetes and Obesity Research Center (DOC): Defining the Metabolic Origins of Disease

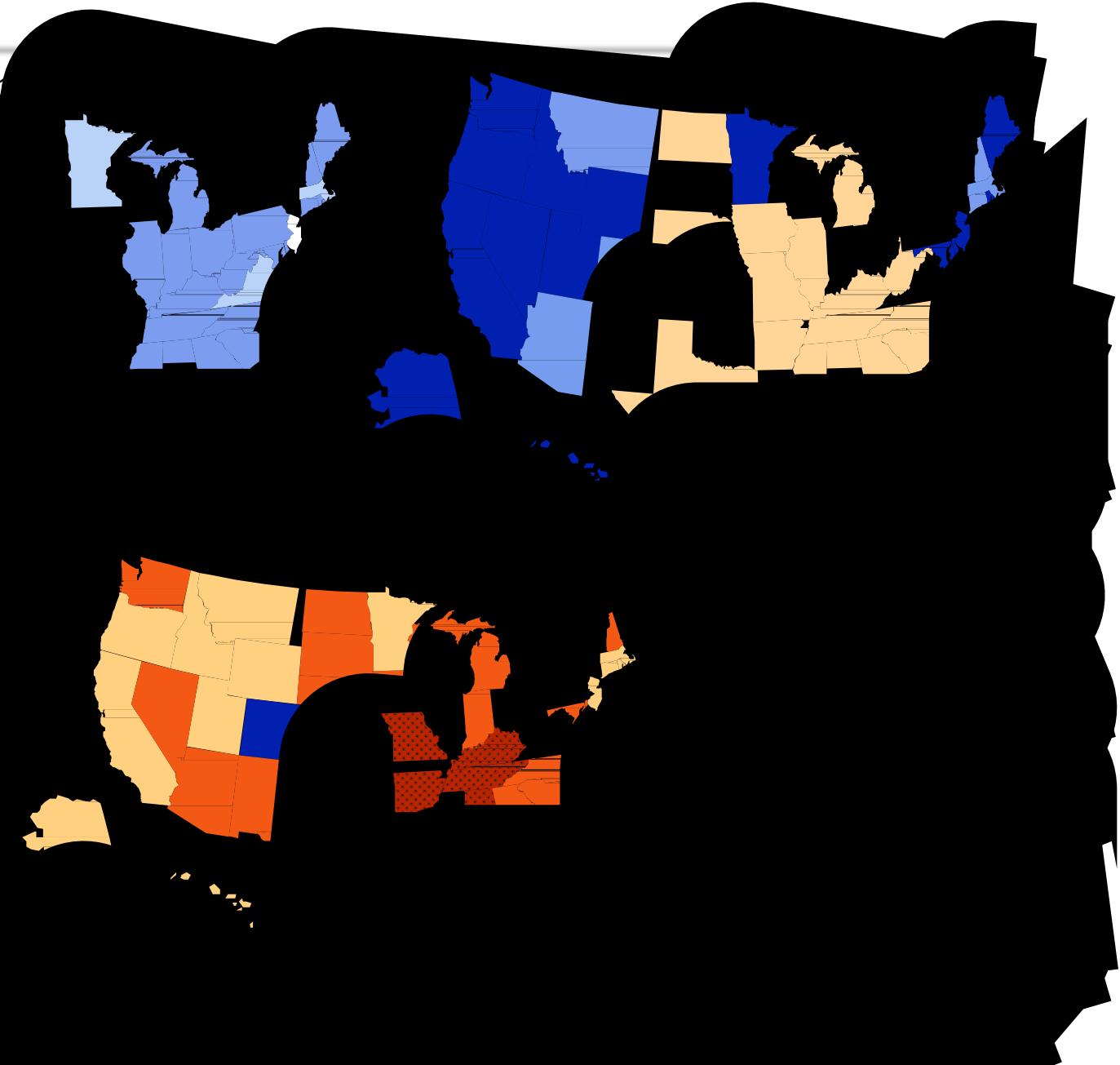
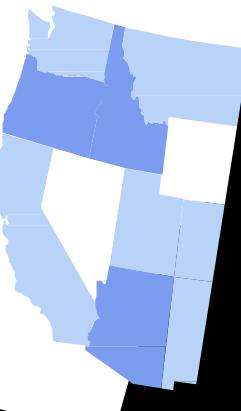


# Why Obesity and Diabetes?

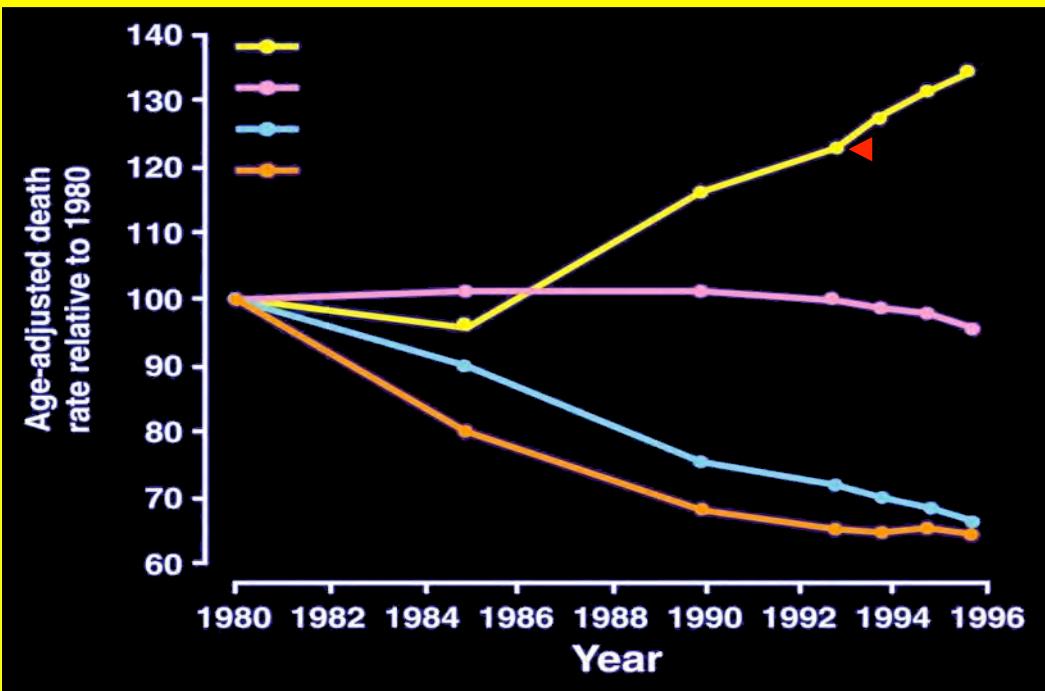
- Obesity contributes to a variety of chronic diseases
- Obesity is driving a dramatic expansion of Type 2 diabetes – major cause of death in U.S.
- Spreading to pediatric age groups: Super-sized kids may have shorter life expectancy than parents



# Obesity Trends Among U.S. Adults



# Diabetes is a Lethal Disease



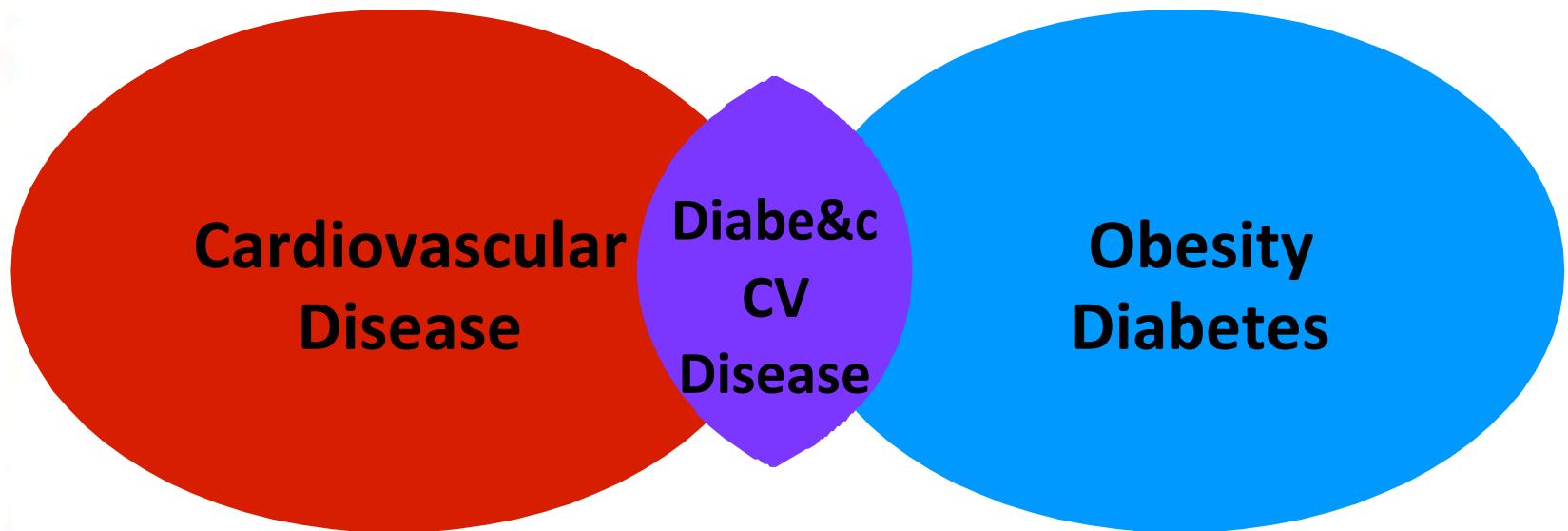
National Center for Health Statistics, 1998

- Cardiovascular disease is the leading cause of death
- The prognosis is grim for diabetics following heart attack



# Our Research Pursuits:

## Interdisciplinary, Collaborative, Disease-oriented



# Accomplishments to Date

- 2/3 of the way towards reaching our faculty recruitment goal of 28-30
- Over half way towards meeting our 2016 employment goal of 300 positions
- Created high-value jobs, paying 130 percent average private sector wage in Orange County



# Sanford-Burnham at Lake Nona Faculty

Wood  
*Univ. of Alabama*

Osborne  
*UC Irvine*

Altarejos  
*Salk*

Sikder  
*UTSW*

S. Smith  
*Pennington*



## Accomplishments to Date

---

- Received over \$52 million in research grants
- Published over 130 scientific papers
- Written 155 contracts (MTAs, CDAs, RCAs, etc.)
- Completed 13 patents and 21 invention disclosures (potential patents)
- Brought multiple pharmaceutical companies to Orlando to consider partnerships

# We are Diversifying Our Revenue Streams

Orlando Sentinel

Tuesday, December 26, 2011

GEORGE DIAZ  
BCS has nothing on NFL playoff high jinks.

By Linda Shrieves  
STAFF WRITER

Officials at Orlando's Sanford-Burnham Research Institute and Florida Hospital on Monday announced a major partnership with Asia's largest pharmaceutical company — an alliance that will explore new ways to treat obesity.

Takeda Pharmaceuticals, a Japanese firm that has made major investments in diabetes and obesity research, inked a two-year deal with the nonprofit biomedical research facility at Lake Nona and its joint venture with Florida Hospital, the Translational Research Institute for Metabolism and Diabetes.

The two-year collaboration includes research funding from Takeda, but officials involved in the agreement would not disclose the terms of the deal. However, Sanford-Burnham officials said the new alliance is one of the

**HEALTH KEY**  
[orlandosentinel.com/health](http://orlandosentinel.com/health)

A little weight-loss praise could go a long way — if you do it right.

- The percentage of total research dollars from outside of Florida has risen from 40% to 50% in one year ( 2010 – 2011)
- Launched commercial research partnership with Takeda Co. and Florida Hospital, bringing revenue and akracRng internaRonal industry akenRon to region

# Florida Translational Research Fund

- State of Florida approved recurring \$3MM to fund collaborative research with universities and non-profit institutes throughout Florida
- The program provides scientists statewide with access to Sanford-Burnham's state-of-the-art technologies for drug discovery
- Leverages the government's (state and local) prior investment

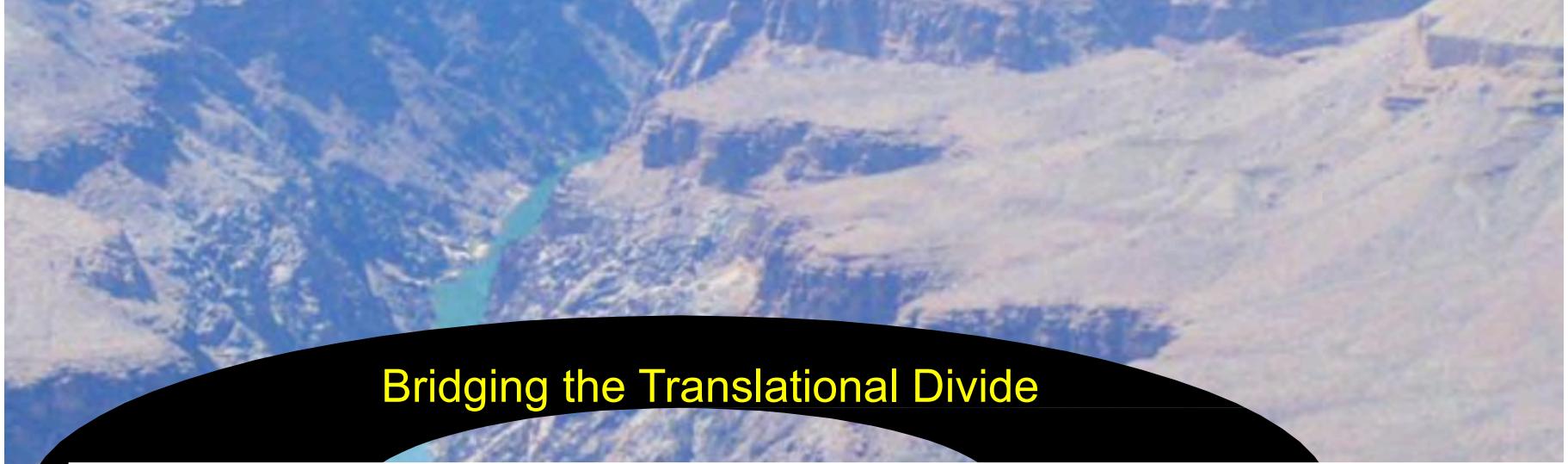


# Training Tomorrow's Scientists in Orange County

## Inspiring a passion for science:

- Rigorous postdoctoral research training
- United Negro College Fund – Sanford-Burnham four year scholarship
- Contribute to science curriculum in local schools
- Lab clinics for teachers
- Career days for college and high school students
- Internships and summer camps





## Bridging the Translational Divide

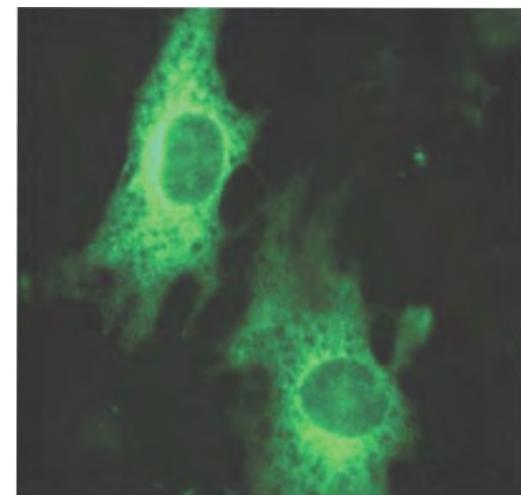
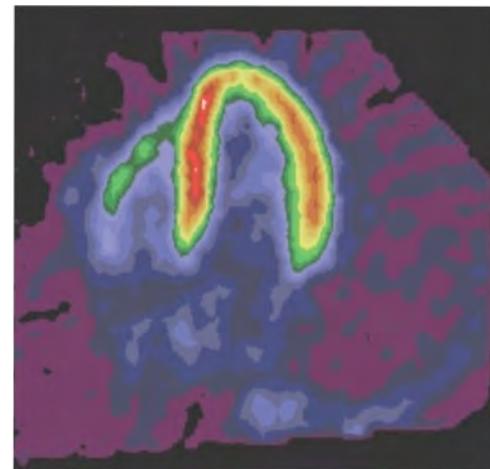
Discovery



Improving Patient Care



# Towards Personalized Medicine



*ansla(onal Research Ins(tute  
r Metabolism and Diabetes (TRI)  
orida Hospital/Sanford-Burnham*



**Research Discovery and Validation in**

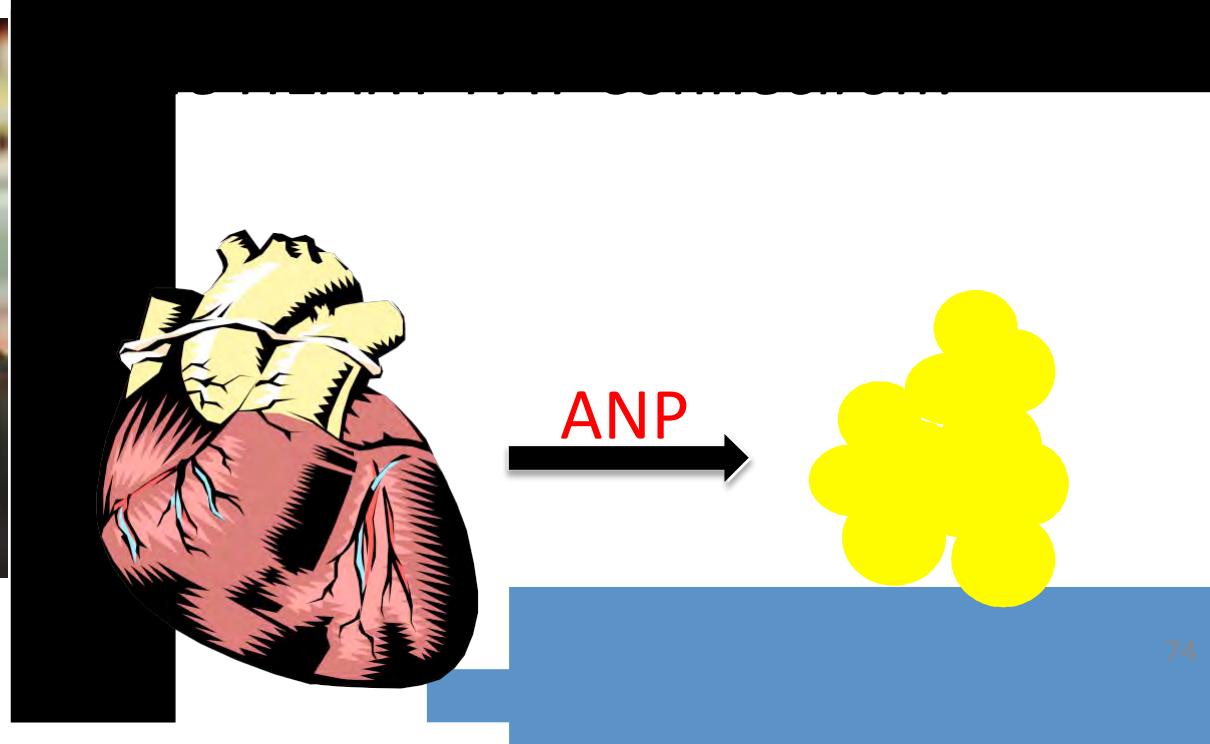
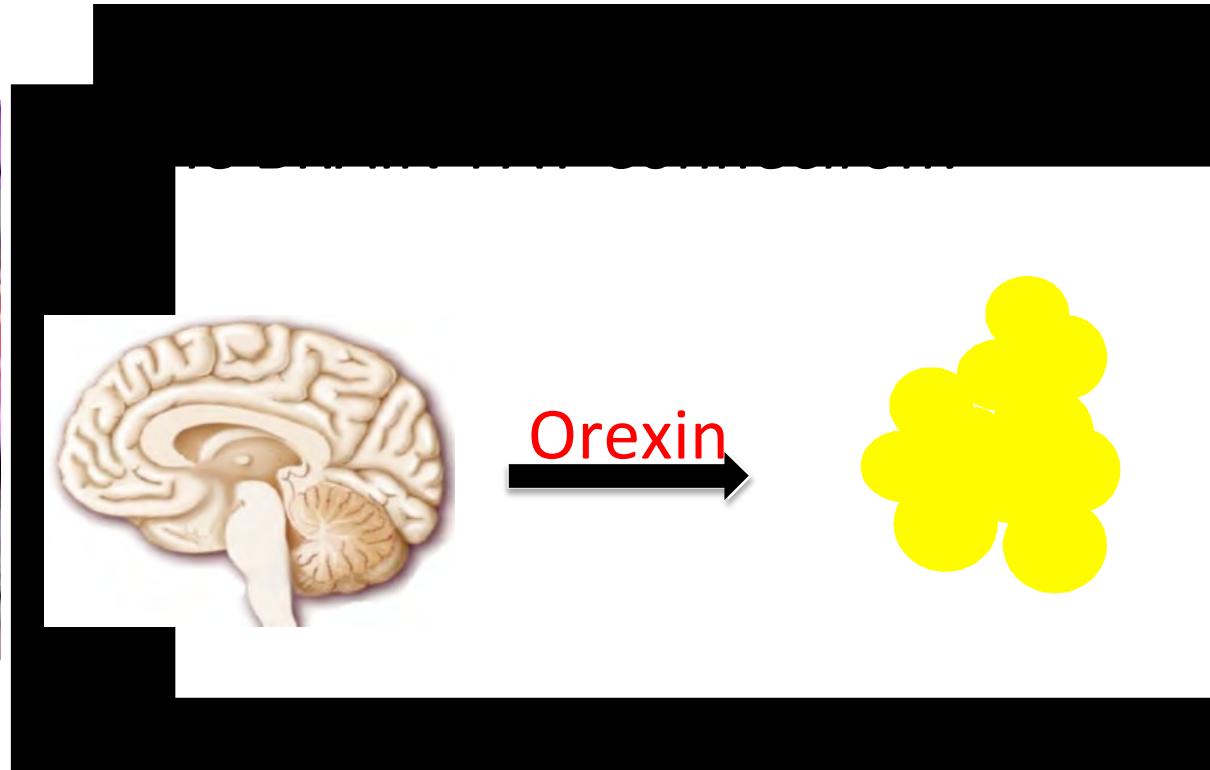
**lumans**



Dr. Dev Sikder



Dr. Sheila Collins



*anford-Burnham wishes to express  
pecial thanks to the City of Orlando  
for your support and partnership*

