## The Path Ahead:

**President's Address to the Faculty Senate** 





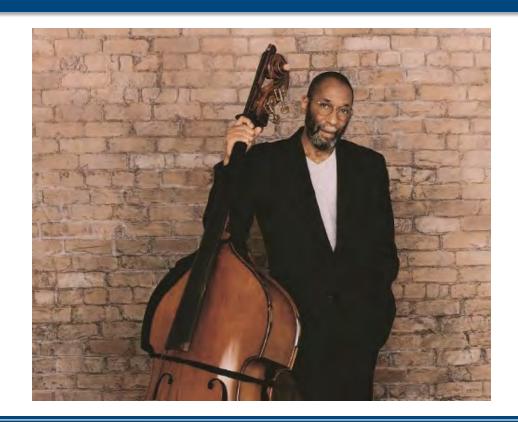
UNIVERSITY of ROCHESTER

Tuesday, April 10, 2012

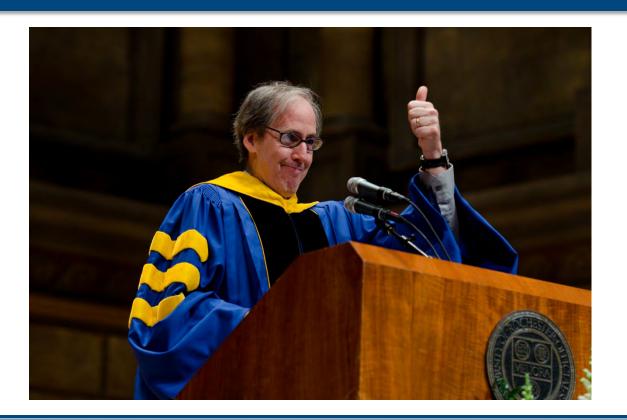
# Renée Fleming



## **Ron Carter**



# Jeff Beal



# George Walker



Piano ARTIST'S DIPLOMA

## **Award Winning Eastman Theatre**









### **Ernest & Thelma Del Monte Distinguished Professor of Neuromedicine**

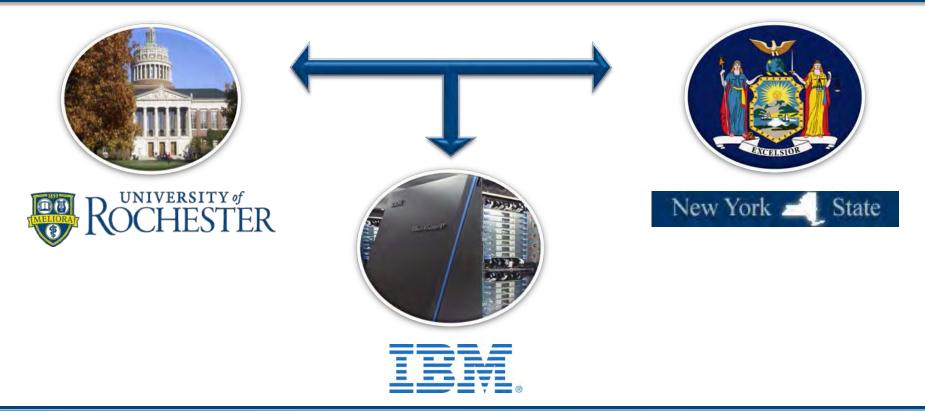


## Golisano Children's Hospital





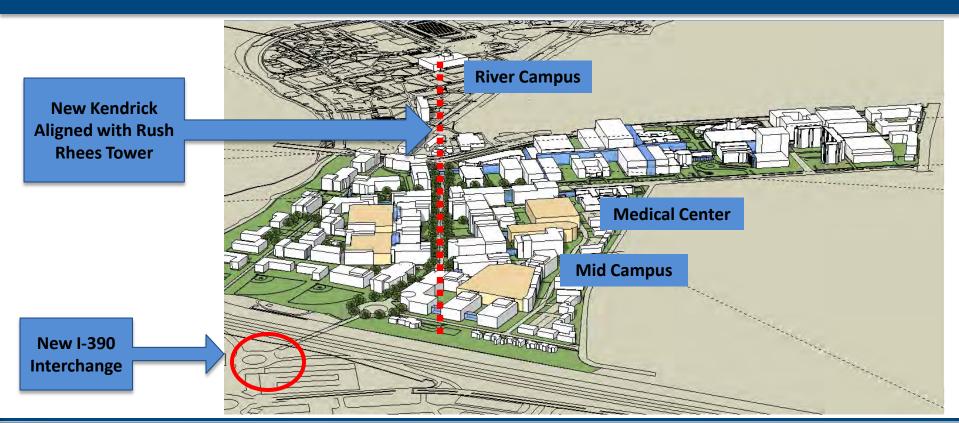
### **Health Sciences Center for Computational Innovation**



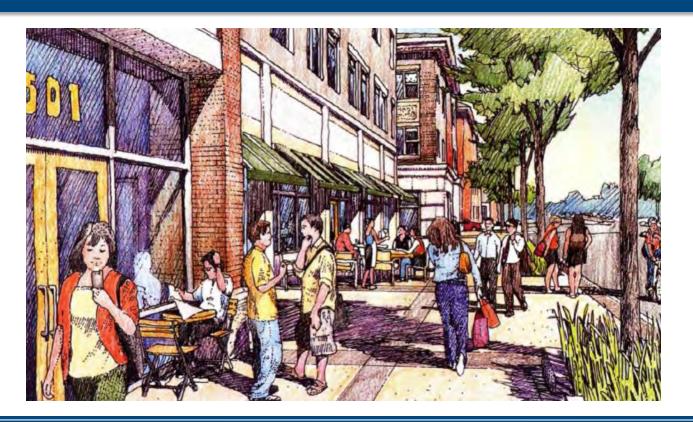
## Hulin Wu



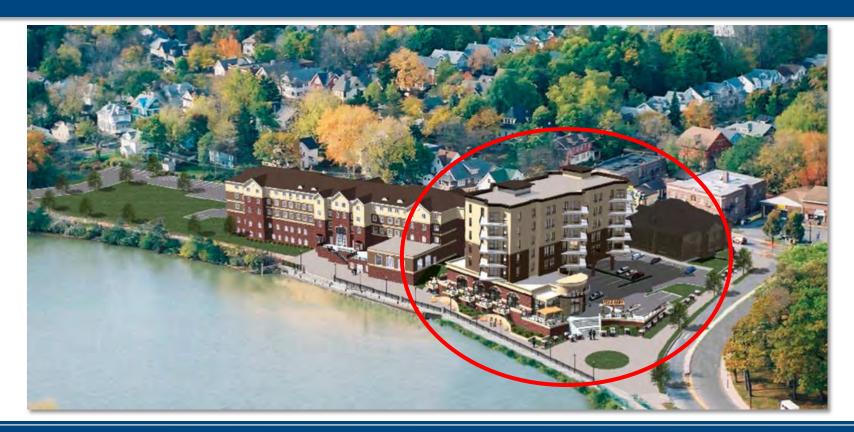
# I-390/Kendrick Road Interchange



# **College Town**



# **Brooks Landing Expansion**



# Ralph Kuncl



## **Brad Berk**



# **College Admissions Data**

Admission Year:	2005	2009	2011	2012
Applicants	11,293	12,111	13,678	14,824
Final Admission Offers	5,380	4,637	4,942	
Enrolled	997	1,080	1,152	
High School GPA	3.56	3.72	3.81	
Two-score SAT	1304	1330	1346	

## Simon Rankings - The Financial Times

#### Top 10 - Finance

- 1. New York University: Stern
- 2. Columbia Business School
- 3. University of Rochester: Simon
- 4. University of Pennsylvania: Wharton
- 5. University of Chicago: Booth
- 6. London Business School
- 7. University of Iowa: Tippie
- 8. University of Toronto: Rotman
- 9. Carnegie Mellon: Tepper
- 10. Rice University: Jones

#### **Top 10 - Economics**

- 1. University of Chicago: Booth
- 2. Cranfield School of Management
- 3. MIT: Sloan
- 4. University of Rochester: Simon
- 5. Universität St. Gallen
- 6. Warwick Business School
- 7. Carnegie Mellon University: Tepper
- 8. Yale School of Management
- 9. University of Cape Town GSB
- 10. Incae Business School

#### **Top 10 - Accountancy**

- 1. Brigham Young University: Marriott
- 2. University of Texas at Austin: McCombs
- 3. Boston College: Carroll
- 4. Texas A & M University: Mays
- 5. University of Pennsylvania: Wharton
- 6. University of Chicago: Booth
- 7. University of Rochester: Simon
- 8. Indiana University: Kelley
- 9. Rice University: Jones
- 10. Cornell University: Johnson

## **Hajim School of Engineering**



**Research & Expenditures** 

Faculty Ranked 4th at \$930,775

**Total Research Expenditures** 

Ranked 28<sup>th</sup> at \$82.8M

## **Dennis O'Brien**



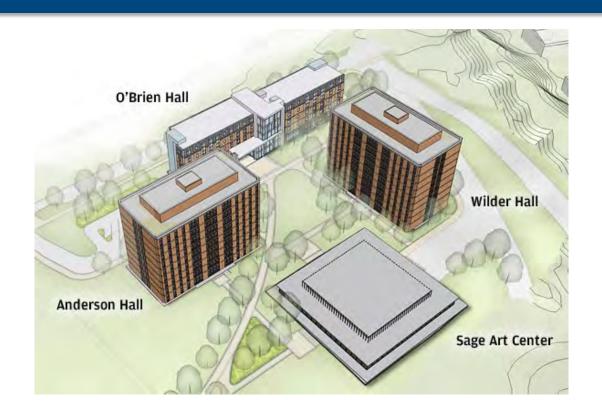
## **Thomas Jackson**



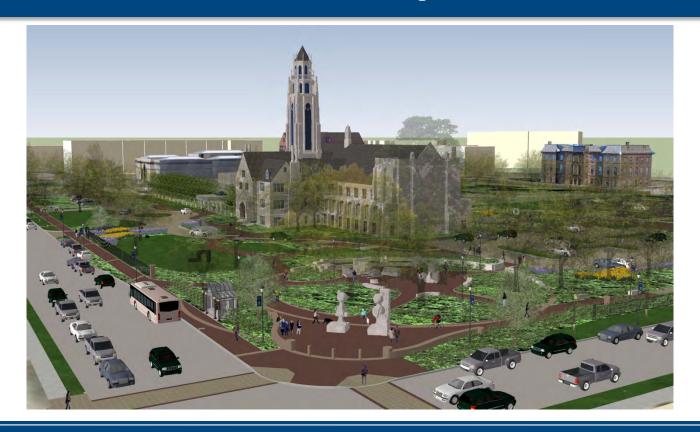
## O'Brien Hall



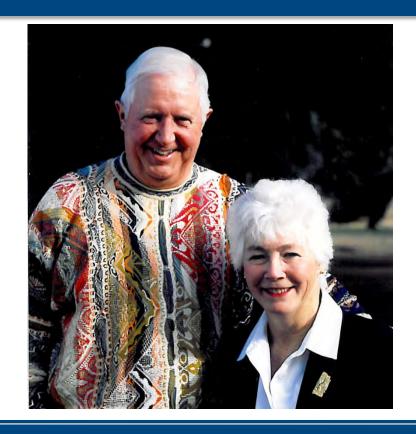
## **Jackson Court**



## **Centennial Sculpture Park**



### Ralph R. and Fay Wadsworth Whitney Endowed Gift Fund



### **Federally Funded Grant Projects at Warner**





# Rochester Fringe Festival



September 20<sup>th</sup> - 23<sup>rd</sup>, 2012



**Christopher Lamb** 

**Best Classical Instrumental Solo** 



### **Robert Ludwig**

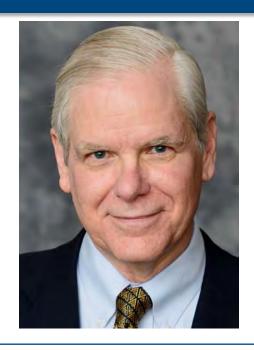
**Best Surround Sound Album** 

### 2011 Ernest Orlando Lawrence Award



Riccardo Betti

## National Academy of Engineering

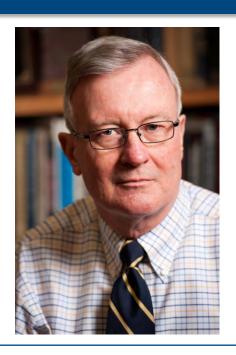


James R. Fienup

### **American Association for the Advancement of Science**



Richard E. Waugh



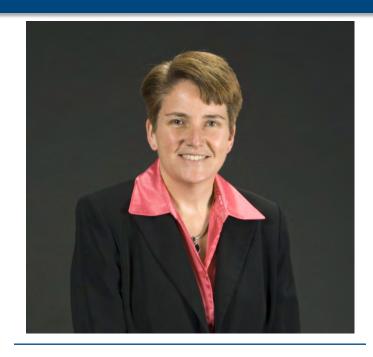
James M. Farrar

### 2011 Elizabeth Hurlock Beckman Award



Susan H. McDaniel

## 2012 Athena Award Recipient



**Judith Baumhauer** 

## **Zvi Zeitlin**



#### **Outstanding Achievement Award in Adolescent Medicine**



Richard E. Kreipe

# 2012 Dr. David Satcher Community Health Improvement Award



Ann M. Dozier



**Sheree L. Toth** 

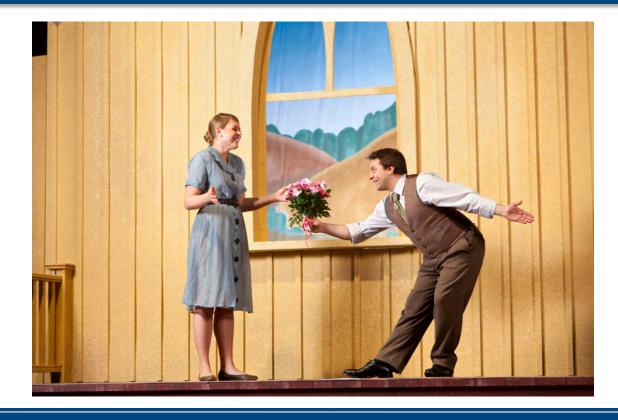
# President of the American Academy of Hospice & Palliative Care



**Timothy E. Quill** 

## **Matthew Grills**



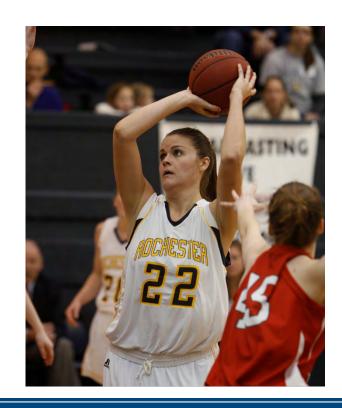


#### Benjamin A. Gilman International Scholars



Berlin, Germany

## **Jodie Luther**



### John DiBartolomeo



## Men's Squash Honors



**Benjamin Fischer** 



**Andres Duany** 

# **UR Muggles Master Quidditch**





## **Presidential Symposium**

#### **Energy in the 21st Century**



**Kristina Johnson** 



**Carmichael Roberts** 

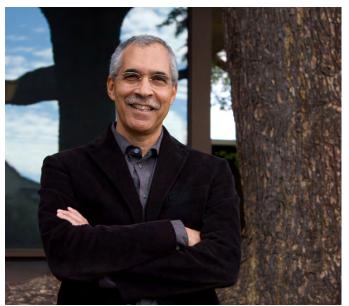


**Eric Toone** 



#### **Third Annual Diversity Conference**





#### **Claude Steele**

# **Expansion of eRecord System**





#### 3<sup>rd</sup> Annual Simon School Conference

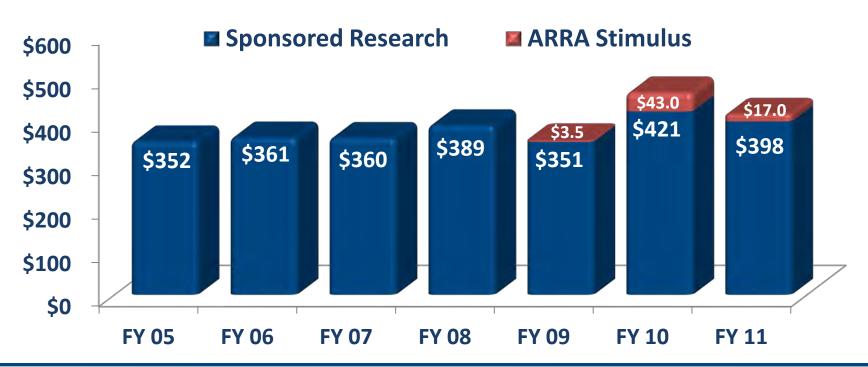


## **Ruth Simmons**



## **Sponsored Research Support**

(In Millions)



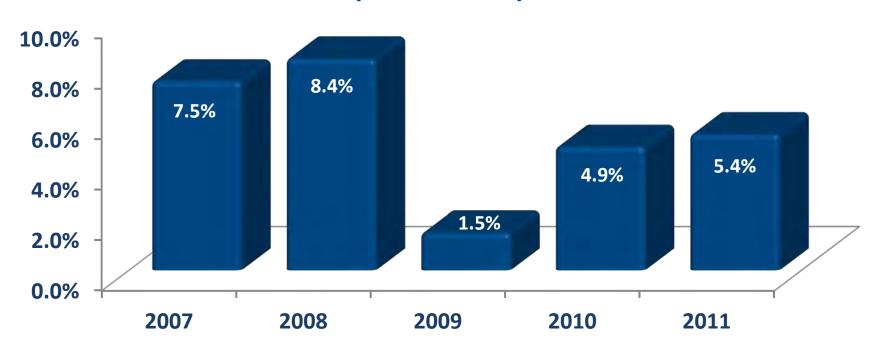
## Our Impact on the Community

- 47,000 jobs Approximately
   9% of total
   employment
- \$2.4B in wages
- \$143M in sales, personal income, and local property taxes



## % Change in Operating Expenditures

(At Year-End)

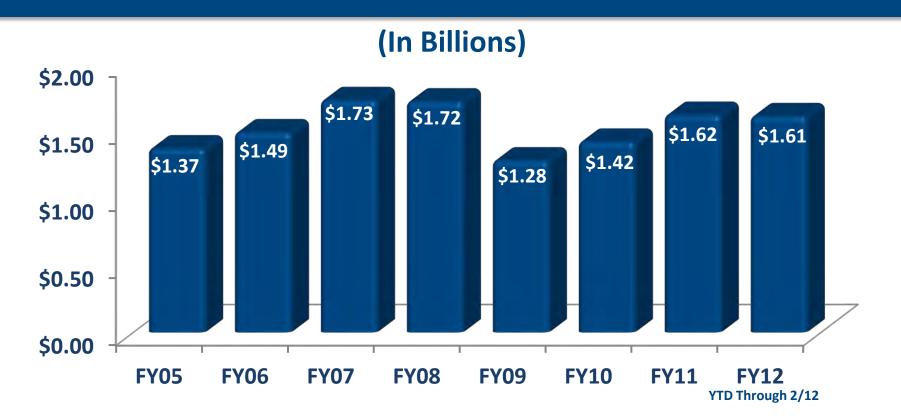


### **Advancement Total Cash Receipts**

(In Millions – Midway Through Year)

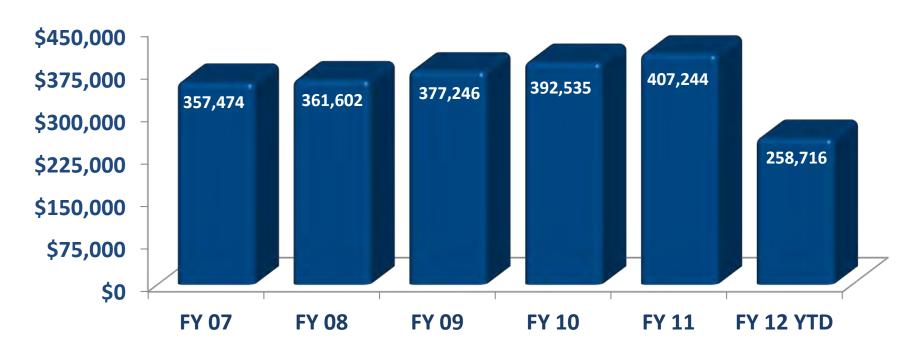


#### **Endowment and Similar Funds**



## **Sponsored Program Expenditures**

#### **Total University - (Dollars in thousands)**



## **University Endowment Draw**

#### **Percent of Five-Year Average**

FY 00	FY 05	FY 07	FY 08	FY 09	FY 10	FY 11
6.9%	6.5%	6.6%	6.6%	6.6%	5.7%	5.8%

## **Dependent Tuition Benefit Modifications**

- Benefit for 10 or More Years of Full-time Service:
  - Changed to 100% minus in-state SUNY tuition starting in fall 2013
  - Dependent children also may apply for other forms of financial aid
  - No change for students currently enrolled and those entering in fall 2012
- Benefit of 50% for 5-10 years of full-time service is unchanged



The National **Debate on** the Cost of a College **Education** 

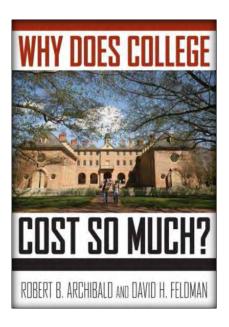
#### **President Barack Obama**

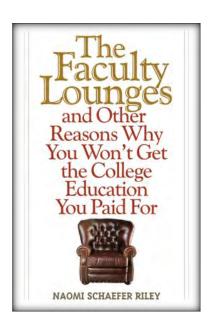


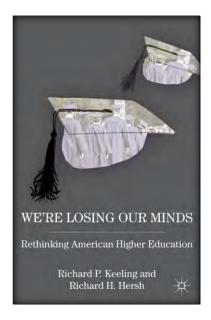
## House Speaker John Boehner

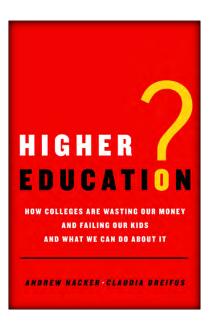


#### The Debate Over Tuition

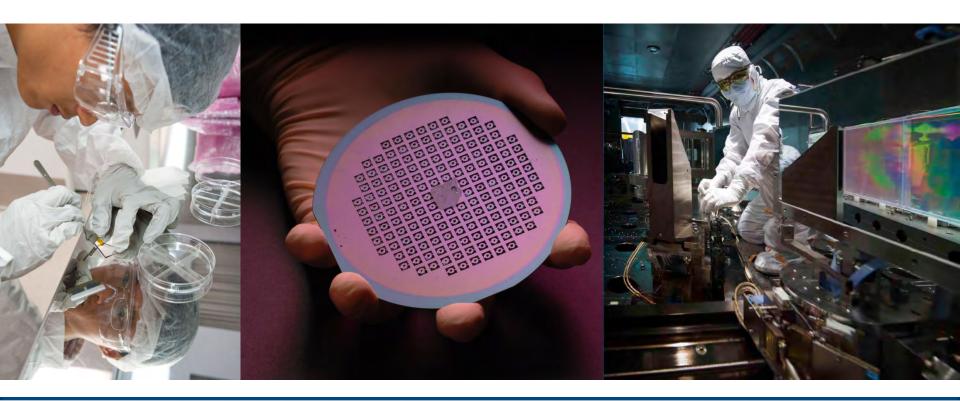






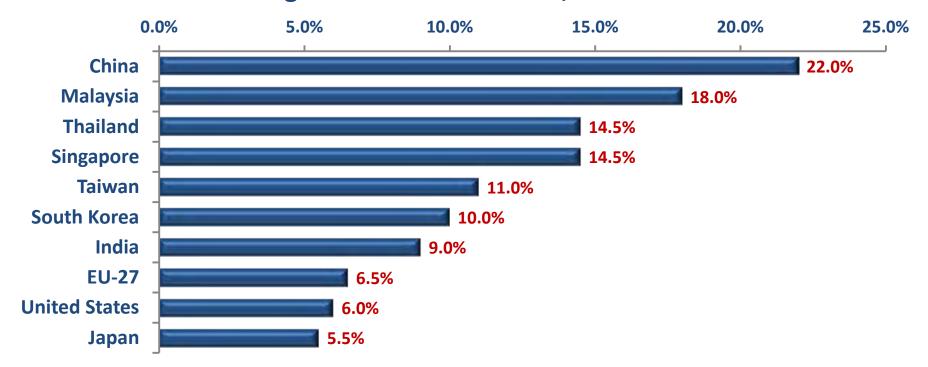


# Leading Research Universities: Providing the World Standard for Economic Development



## **Global Research & Development**

#### Average Annual R&D Growth, 1996 to 2007



## The Benefits of a College Education



## All Degree-Granting Institutions



	4-year	2-year	Total
2005-06	2,582	1,694	4,276
2006-07	2,629	1,685	4,314
2007-08	2,675	1,677	4,352
2008-09	2,719	1,690	4,409
2009-10	2,774	1,721	4,495

# **Community Colleges**



**Public** 

993

Independent

143

**Tribal** 

31

**Total** 

1,167

### **For-Profit Institutions**



	4-year	2-year	Total	
2005-06	408	528	936	
2006-07	453	533	986	
2007-08	490	553	1,043	
2008-09	530	574	1,104	
2009-10	563	636	1,199	

#### 4-Year Public & Private Institutions



	Public	Private	Total
2005-06	640	1,942	2,582
2006-07	643	1,986	2,629
2007-08	653	2,022	2,675
2008-09	652	2,067	2,719
2009-10	672	2,102	2,774

#### **National Research Goals**

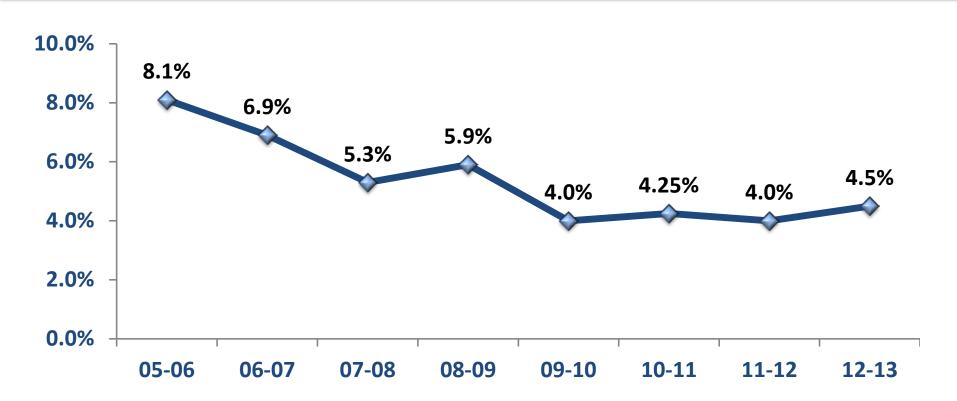
- 58% of <u>all</u> federal research expenditures go to the 59 AAU institutions in the U.S.
- Total = \$18.9 Billion



#### 2012 – 13 Peer Tuition Rates

Institution	% Increase	Tuition	Total % Increase	TOTAL = Tuition + Fees (Cost Rank)
Dartmouth	4.9%	\$43,782	4.8%	\$57,998 (2)
University of Rochester	4.5%	\$42,890	4.3%	\$56,237 (5)
Cornell	4.5%	\$43,185	4.4%	\$57,041 (3)
Princeton	4.5%	\$38,650	4.5%	\$51,280 (10)
Emory	4.4%	\$42,400	4.1%	\$54,980 (9)
Carnegie Mellon	4.0%/3.0% cont.	\$44,880	4.1%	\$56,430 (4)
Duke	4.0%	\$42,308	3.9%	\$56,056 (6)
Washington University	3.8%	\$42,500	4.0%	\$58,467 (1)
Brown	3.6%	\$42,808	3.5%	\$55,016 (8)
Georgetown	3.5%	\$42,360	3.2%	\$55,640 (7)

### **College Tuition Increases**

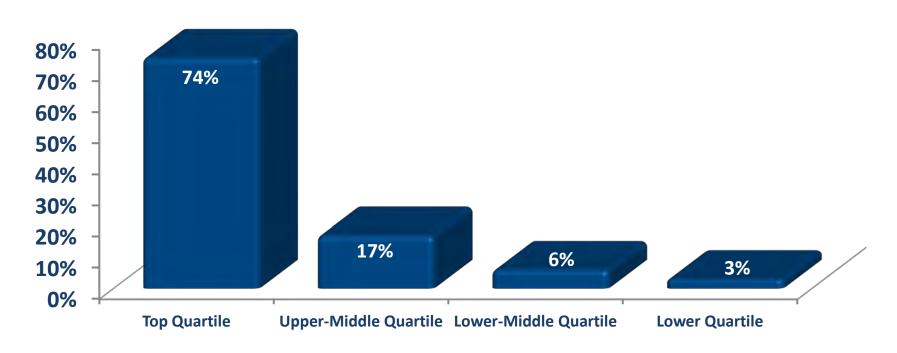


### **State Support for Leading Universities**

2012 <i>US News</i> Rank	Public Institution	1990 - 1991 % of Budget	2008 - 2009 % of Budget
1	University of California - Berkeley	48	27
2	University of California - Los Angeles	29	14
2	University of Virginia	17	n/a
4	University of Michigan - Ann Arbor	14	n/a
5	University of North Carolina - Chapel Hill	39	28
6	College of William and Mary	32	18
7	Georgia Institute of Technology	33	26
8	University of California - San Diego	25	12
9	University of California - Davis	37	18
10	University of California - Santa Barbara	49	25
10	University of Washington	26	13
10	University of Wisconsin - Madison	29	21

## **Century Foundation Study**

**College Matriculants at the Nation's Top 146 Colleges** 



# **Challenges Confronting Institutions**

Top 10 Challenges	All Institutions (Public, Private, For-Profit)
Potential cuts in federal student aid	83.2%
Budget shortfalls	69.9
Declines in state support	66.9
Rising tuition/affordability	65.5
Maintaining the quality of academic programs	53.8
Student assessment and educational outcomes	53.4
Remediation and student readiness for college	52.5
Increased competition for students	52.4
Financial support from alumni	46.0
Financial support from corporate sponsors	40.7

# **Share of Total R&D Spending**

	1999	2010	2011	2012
UNITED STATES	38.0 %	32.8 %	32.0 %	31.1 %
ASIA	24.0	34.3	35.5	36.7
Japan	14.6	11.8	11.4	11.2
China	3.2	12.0	13.1	14.2
India	1.7	2.6	2.8	2.9
EUROPE	26.8	24.8	24.5	24.1
REST OF WORLD	-	3.0	3.1	3.2

## Strengthening STEM Fields

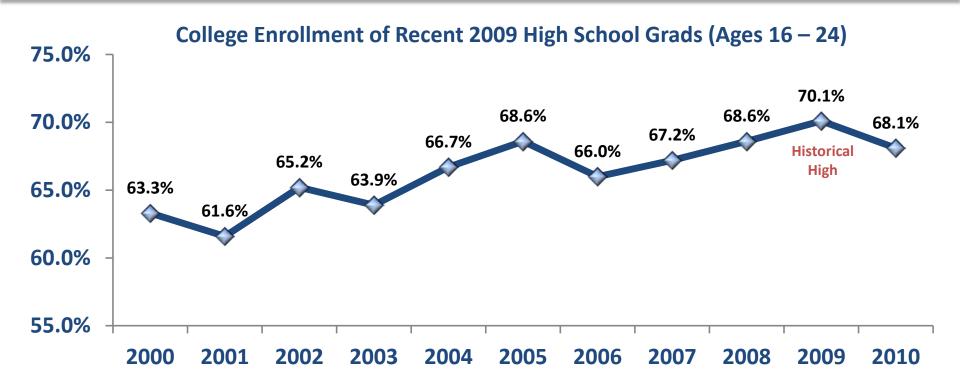


ENGAGE TO EXCEL: PRODUCING ONE MILLION ADDITIONAL COLLEGE GRADUATES WITH DEGREES IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS

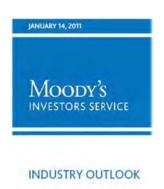
A Report by the President's Council of Advisors on Science and Technology

February 7, 2012

### College Enrollment in the U.S.



# A Flight to Quality



"Evolving demand trends for undergraduate and graduate programs highlight flight to quality and affordability." Those institutions "led by experienced management teams with diverse backgrounds and overseen by strong boards will be best placed to navigate through ongoing future challenges."

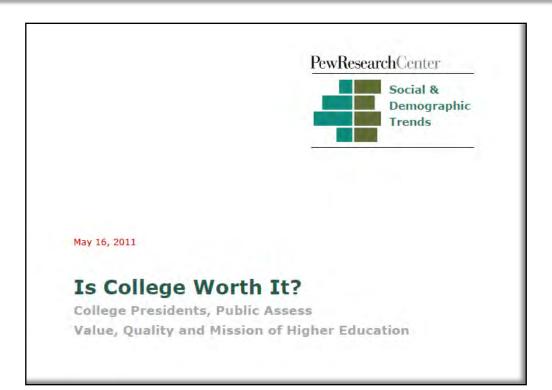
### **Information Technology**







# College Costs & the Tenure System



### The Threat to Our Universities



**Stefan Collini** *The Guardian* 

"The Government is hell-bent on trying to make universities function more like costcutting skills retailers, to whom employers can outsource their job training."

## A "Magical" Entrepreneur



### **2008 Strategic Plans**













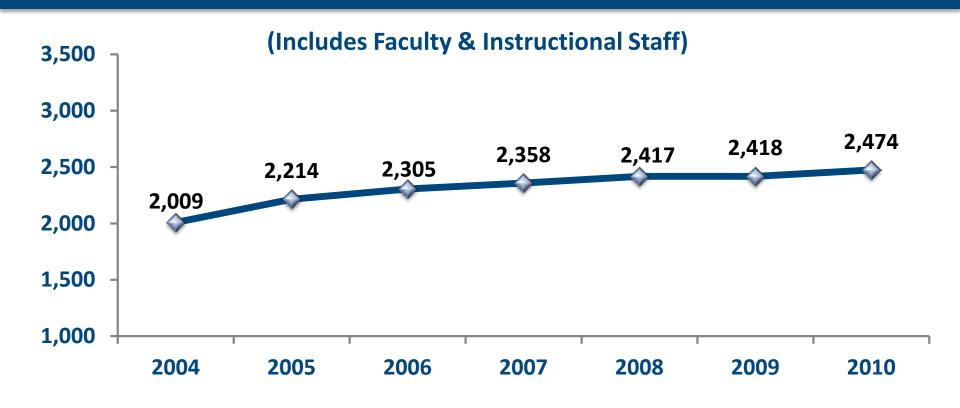


### **Federal Research Funding**

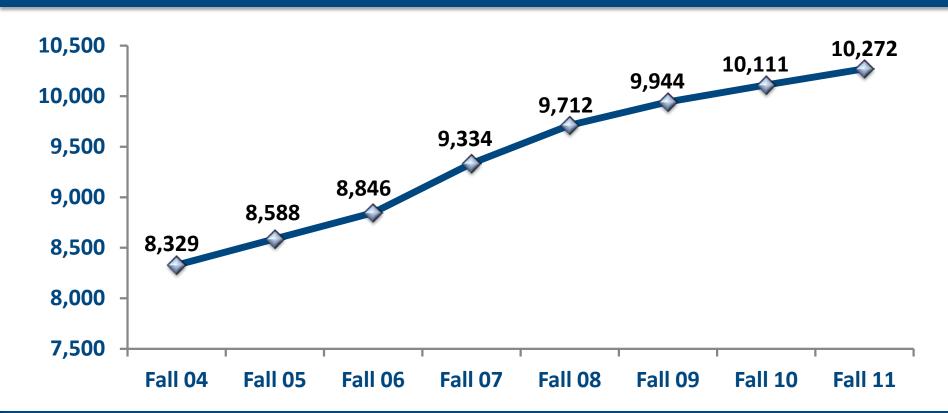
Normalized By Faculty Size (FY09)

Institution	Norm Rank	\$ Rank
California Institute of Technology	1	24
Johns Hopkins University	2	1
Massachusetts Institute of Technology	3	4
University of California-San Diego	4	6
Washington University in St Louis	5	12
Duke University	6	10
Stanford University	7	7
University of Rochester	8	27
University of Pennsylvania	9	5
University of Alabama at Birmingham	10	28
Yale University	11	15
Emory University	12	30
Case Western Reserve University	13	23
Georgia Institute of Technology	14	26
Vanderbilt University	15	20

## **University Faculty Size**



## **University Enrollment**



# **Dining Renovations**





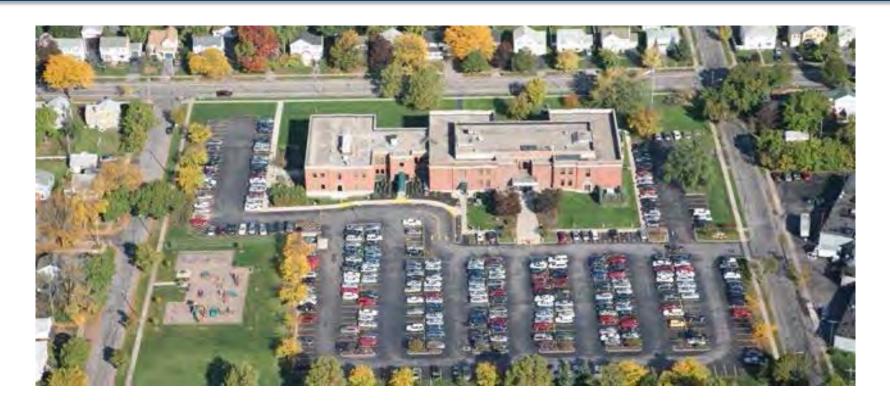
#### **Ernest J. Del Monte Neuromedicine Institute**



## **Major University Facilities Projects**

PROJECT	Cost (Millions)	FY Completion
IN PROGRESS		
Cancer Center Vertical Expansion, Phase I	\$ 59	2012
Dennis O'Brien Undergraduate Residence Hall/Thomas Jackson Court	17	2012
Raymond F. LeChase Hall (Warner School)	24	2013
PLANNED		
New Digital Media and Innovation Center	<b>\$ 11</b>	2013
Golisano Children's Hospital at Strong Tower Project, Phase I	145	2015
New Electrical Substation, Phase I	25	2014
Middle Campus Chilled Water Expansion, Phase I		2014
MAJOR PROJECTS (Completed, In Progress, Planned)	SINCE 2005:	20
TOTAL CUMULA	TIVE VALUE:	\$662M

# **Lattimore Building**



## Raymond F. LeChase Hall



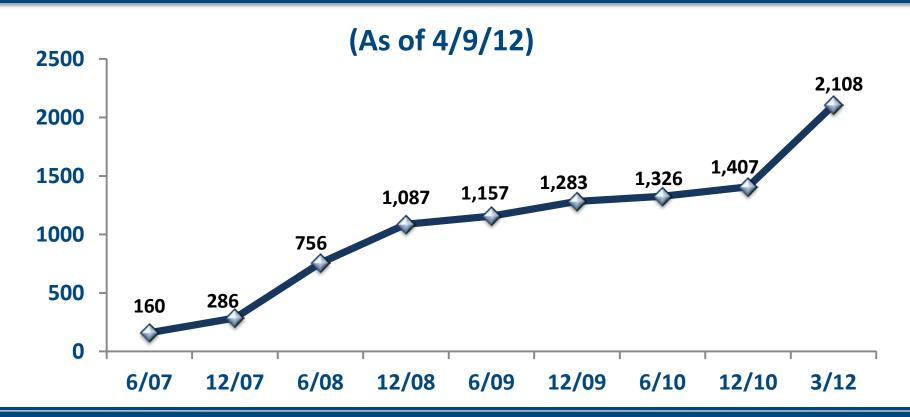
#### Wilmot Cancer Center Vertical Expansion



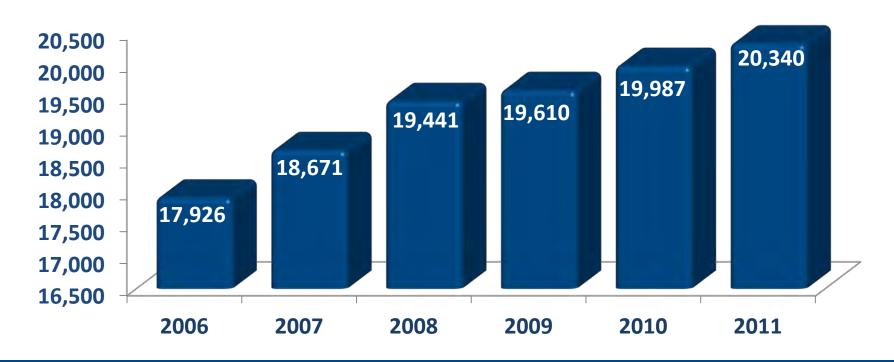
### **Digital Media and Innovation Center**



### George Eastman Circle Membership



## **Full-Time Equivalent Positions**



### Top 20 Private Employers in NYS 2011

Rank	Company	NYS Empl
1	Walmart	28,000
2	Citigroup	27,000
3	Verizon	27,000
4	Wegmans Food Markets Inc.	21,000
5	JP Morgan Chase	21,000
6	University of Rochester/Medical Center	20,000
7	IBM Corp.	20,000
8	New York-Presbyterian Hospital	19,000
9	New York University/School of Medicine	18,000
10	Montefiore Medical Center	17,000

Rank	Company	NYS Empl
11	Cornell University/Weil Medical	16,000
12	<b>Columbia University/Medical Center</b>	15,000
13	Memorial Sloan-Kettering Cancer Center	12,000
14	Merrill Lynch	11,000
15	Macy's Inc.	11,000
16	Kaleida Health	10,000
17	<b>General Electric Company</b>	9,000
18	Credit Suisse	9,000
19	Price Chopper	9,000
20	Patriarch Partners, LLC	8,000

### **Contextual Changes Since 2008**

- Uncertain economy
- Implications for fundraising
- Reductions in federal programs
  - Sponsored research
  - Medicare and Medicaid
  - State health care support
  - Third party payors

## Red Shift in Our Leading Peers

(All Numbers in Millions)	1990 Endowment	2010 Endowment	Increase
1 Harvard	\$ 4.6	\$ 28.0	\$ 23.4
2/4 Texas System	3.7	14.0	10.3
3/2 Yale	2.6	17.0	14.4
4/3 Princeton	2.6	14.0	11.4
5 Stanford	2.1	13.9	11.8
16/21 Vanderbilt	.6	3.0	2.4
17/22 Dartmouth	.6	3.0	2.4
18/45 Rochester	.6	1.4	.8
19/25 Johns Hopkins	.6	2.2	1.6
20/34 Rockefeller	.5	1.6	.9

### **Declining Support for Publics**



### Increased International Competition



#### Increase in For-Profit Institutions





# Federal R&D Funding by Agency

(Budget Authority - In Millions of Constant FY08 Dollars)

	2005	2010	2011	2012
National Institutes of Health	\$ 30,140	\$ 31,424	\$ 30,163	\$ 30,107
National Science Foundation	4,436	5,445	5,372	5,537
Department of Energy	9,320	10,836	10,241	11,062

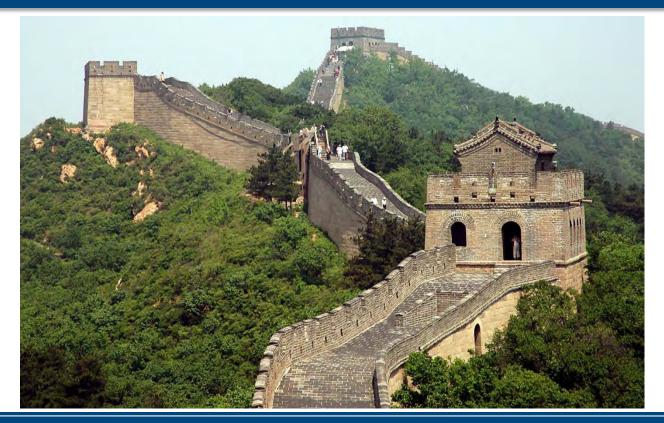
### Strengthen Our Build-up in Rochester



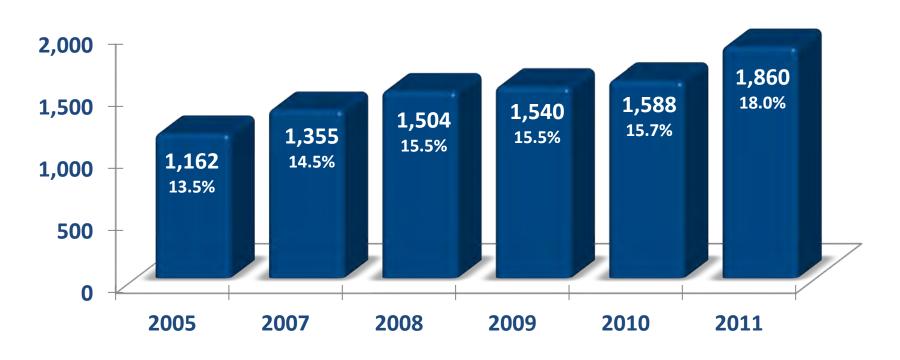
### **New York City Opportunities**



# International Opportunities



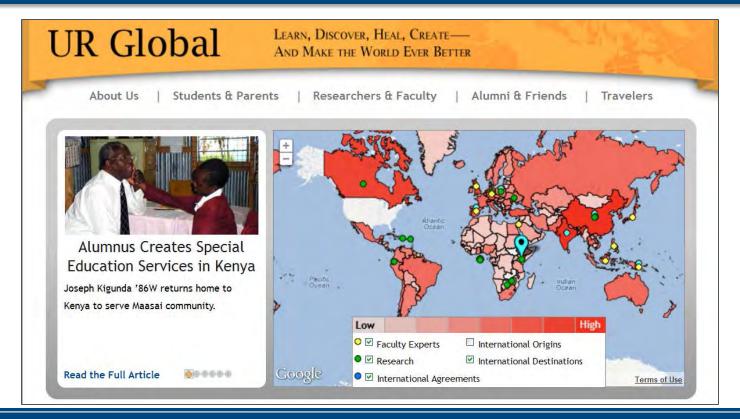
#### **International Students**



# Study Abroad



### **Current International Programs**



# **International Expansion**



