

### UKRF Board of Directors 2009 Research Report

James W. Tracy
Vice President for Research

13 May 2009



New federally-negotiated F&A rate

• FY2009

47.5%

• FY2010

48.5%

- Revised F&A policy
- Improved process for faculty start-up
- Faculty start-up support
  - FY2009 commitments: \$12.6 million
  - 206 active accounts (FY2005-FY2009)



- \$1.42 million HRSA grant
  - Upgrades high bandwidth connection to Internet 2 from 1GB to dual 10GB
  - UK and other KY universities (KYRON)
- National Institute for Hometown Security
  - Completed negotiation of master agreement
  - \$10.9 million to UK investigators
- FY 2009 federal appropriations
  - \$19.7 million for 17 UK projects



- Implemented web-based Lobbying Activity Reporting and Tracking system
- Electronic transfer of new award information from OSPA to SPA
- Ad hoc faculty committee on animal use protocols
- New associate vice presidents
  - Jack Supplee
  - Debbie Davis



- Kentucky Geological Survey
  - \$7.29 million partnership to test CO<sub>2</sub> storage
  - Blan No. 1 well (Hancock Co.)
  - 4,500 ft on the way to 8,350 ft
- Center for Applied Energy Research
  - \$2.6 million algae-CO<sub>2</sub> capture pilot project
  - Consortium with government and industry to manage CO<sub>2</sub> (\$24 million over 10 years)
- Kentucky-Argonne Battery Manufacturing R&D Center at Spindletop



- Tracy Farmer Institute for Sustainability & the Environment (TFISE)
  - New OVPR institute starting July 1, 2009
  - Director: Professor Paul Bertsch
- Initiative to stimulate research in arts & humanities
  - Supplement to National Endowment for the Humanities full-year fellowships
- Center for Clinical & Translational Science
  - Provost Office
  - Housed on 1<sup>st</sup> floor of Kentucky Clinic



- Proposal numbers steady
- 13 Shared Instrumentation Grant proposals to NIH (S10)
  - Equals total from previous seven years
- Recovery Act proposals
  - April 2009: 207 total proposals (198 to NIH)
  - NIH C06 application to fit-up Bio-Pharm 4<sup>th</sup> floor
  - NIH G20 application to renovate BLS-3 suite



## Research Initiatives 2009 – 2010

- Refine research business processes to improve communication with and support for investigators
- Assess research compliance risk
- Increase effective F&A cost recovery
- Return on investment analysis
- AAHRPP accreditation (human subjects)
- Identify and engage new sources of research support



#### Challenges to Research

- Research space limitations
- Aging research equipment
- Faculty & staff retention
- Research compliance
- Recovery Act reporting requirements



# Top 20 Update FY 2007 NSF Ranking

#### **Total R&D expenditures**

- UK 36<sup>th</sup> \$331.1 million (34<sup>th</sup> in FY06)
   2.2% increase over FY2006
- Georgia Tech 20<sup>th</sup> \$472.6 million
- Only \$56,000 behind NC State (35<sup>th</sup>)
- Only \$1 million behind UGA (34<sup>th</sup>)



# Top 20 Update FY 2007 NSF Ranking

#### Federal R&D expenditures

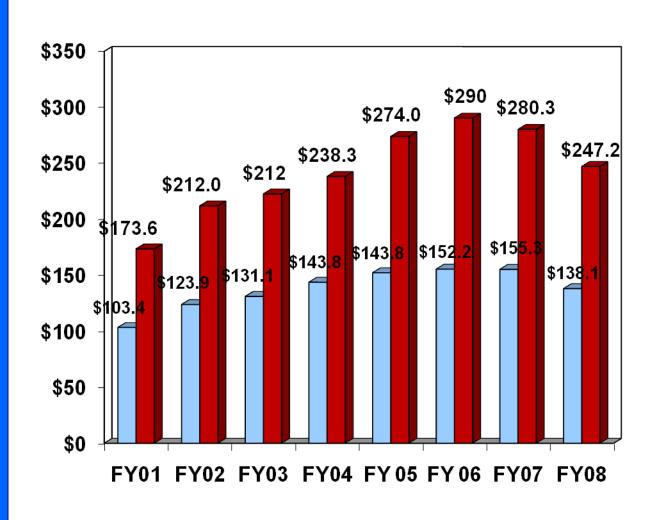
• UK 39<sup>th</sup> \$154.7 million (40<sup>th</sup> in FY06)

2.3% increase over FY2006

UC Berkeley 20<sup>th</sup> \$251.0 million



#### **Grant & Contract Awards**



- Federal Grants & Contracts
- Total Grants & Contracts



#### **FY08 Unit Awards**

College	Awards 2007	Awards 2008	Difference
Medicine	\$115,365,436	\$107,171,392	-\$8,194,044.00
Agriculture	\$31,488,174	\$30,972,002	-\$516,172
Research C&I	\$36,962,004	\$25,962,004	-\$11,000,000
Engineering	\$24,513,633	\$21,941,259	-\$2,572,374
A&S	\$20,774,333	\$14,604,797	-\$6,169,536
Pharmacy	\$9,716,255	\$11,539,783	\$1,823,528
Public Health	\$7,753,385	\$6,835,179	-\$918,206
Education	\$7,143,734	\$6,414,831	-\$728,903
Social Work	\$4,946,759	\$4,559,522	-\$387,237
Dentistry	\$4,655,518	\$3,889,044	-\$766,474
B&E	\$3,480,415	\$2,921,601	-\$558,814
Nursing	\$3,439,076	\$2,473,537	-\$965,539
Health Sciences	\$2,395,310	1,519,459	-\$875,851
Graduate School	\$2,802,385	\$1,360,897	-\$1,441,488
Communications	\$853,174	\$1,134,418	\$281,244
Libraries	\$765,578	\$630,369	-\$135,209
Design	\$82,900	\$52,000	-\$30,900
Law	\$1,498,842	\$36,000	-\$1,462,842
Fine Arts	\$20,000	\$20,000	\$0
Other	\$1,608,377	\$3,184,372	\$1,575,995
TOTAL	\$280,265,288	\$247,222,466	-\$33,042,822

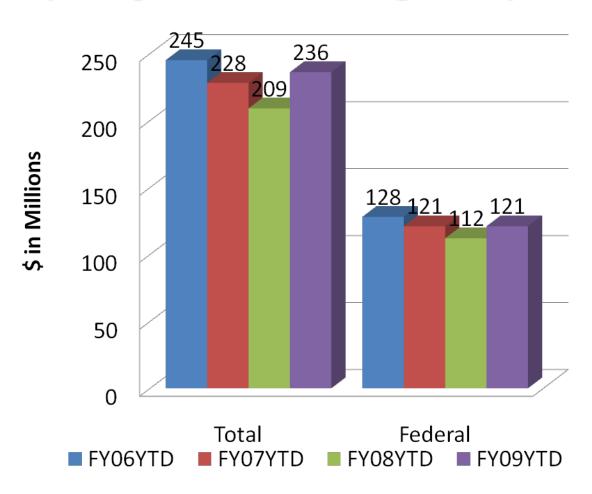


### **FY08 Unit Expenditures**

	Expenditures		
	Direct	F&A Realized	
College	2008	2008	
Medicine	\$125,909,095	\$22,577,594	
Research C&I	\$26,193,195	\$3,434,935	
Engineering	\$23,240,161	\$4,337,632	
Agriculture	\$21,573,267	\$2,547,137	
A&S	\$13,791,116	\$3,646,474	
Pharmacy	\$7,031,334	\$2,319,224	
Public Health	\$6,375,366	\$942,266	
Education	\$5,659,097	\$532,565	
Social Work	\$4,677,416	\$408,755	
B&E	\$2,728,537	\$300,636	
Dentistry	\$2,696,713	\$818,028	
Nursing	\$2,357,040	\$705,445	
Health Sciences	\$1,677,026	\$481,062	
Graduate School	\$1,123,367	\$189,409	
Libraries	\$680,284	\$55,708	
Law	\$606,686	\$10,334	
Communications	\$394,167	\$240,216	
Design	\$85,318	\$12,190	
Fine Arts	\$24,294	\$0	
Other	\$10,933,723	\$255,669	
TOTAL	\$257,757,202	\$43,815,279	

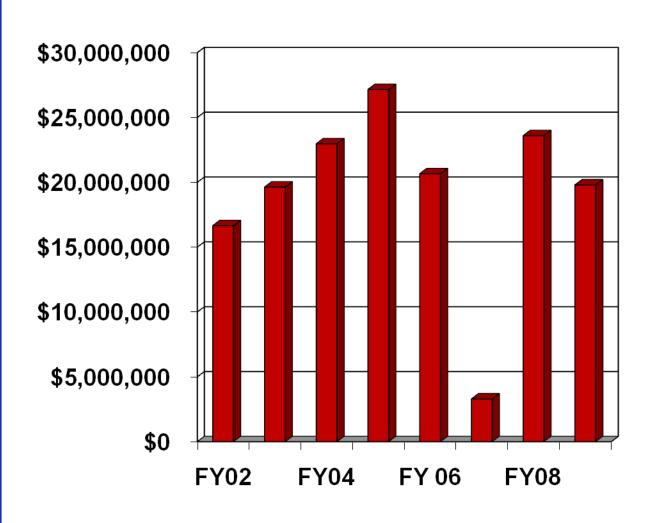


# Awards Year-to-Date (July 01 through April 30)





### **Directed Appropriations**





# FY09 Appropriations by Category

(millions)

•AGRICULTURE \$6.86

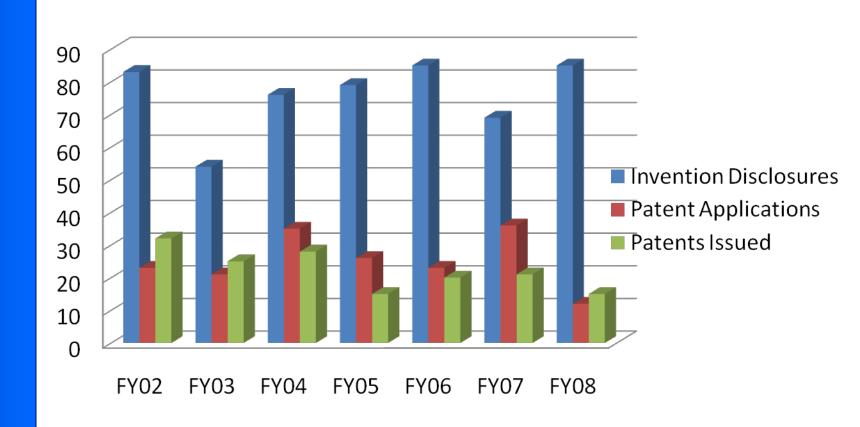
•DEFENSE \$2.80

•ENERGY \$5.61

•LABOR/HHS \$4.47

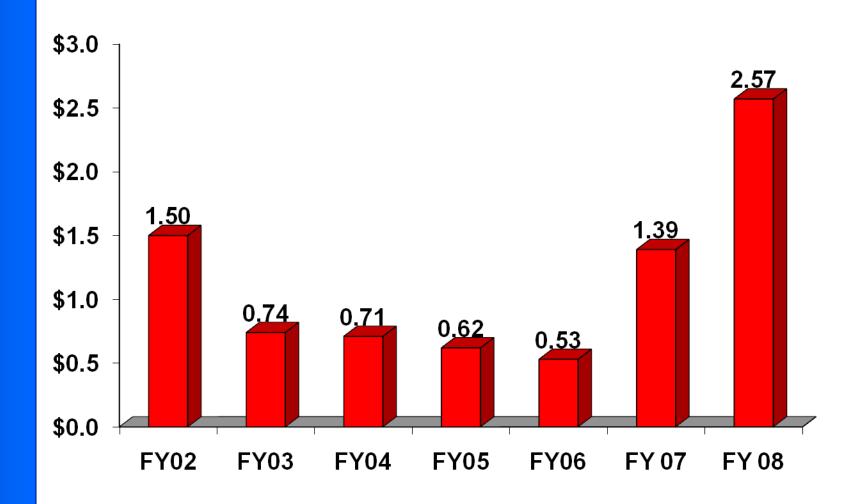


# Intellectual Property Activity





#### **Patent Income**



As reported in the UK Financial Statement



# FY2008 UKRF Expenditures (\$49.47 million)

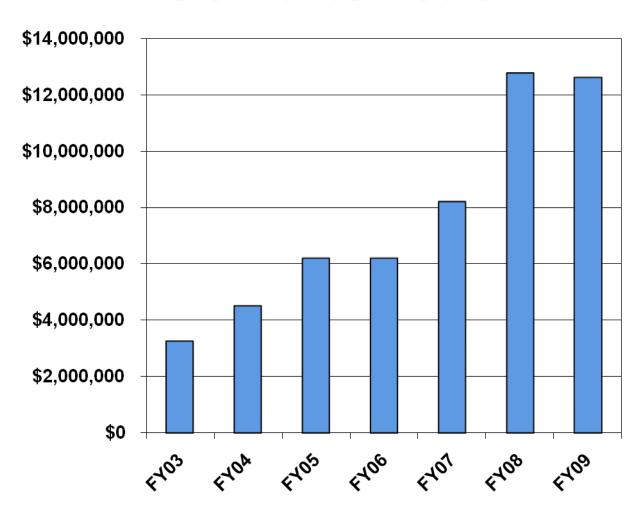
Grant to UK \$7.53 million (15.2%)

Faculty & Academic Units \$31.13 million (62.9%)

Research Admin \$10.81 million (21.9%)



# Faculty Start-up Commitment





#### Realized F&A Income

FY2006 \$43.04 million

FY2007 \$43.57 million

FY2008 \$43.81 million

FY2009 \$41.5 million\*

\*Projected as of April 30, 2009



### **Federal Funding Outlook**

- FY2010 federal budget released
  - 3.4% increase for basic research
  - 1.4% base increase for NIH
  - Double NSF and DOE Office of Science budgets within 10 years.
- American Recovery & Reinvestment Act of 2009
  - Short-term, one-time funding
  - Potential F&A income not figured in UKRF budget



#### Realized F&A Income

FY2006 \$43.04 million

FY2007 \$43.57 million

FY2008 \$43.81 million

FY2009 \$41.5 million\*

\*Projected as of April 30, 2009

**FY2010** \$41 million (est.)



### **Proposed FY2010 UKRF Budget**

	FY09 Approved Budget	FY10 Proposed Budget	Difference
REVENUE			
I. Sponsored Projects			
Grants & contracts	280,000,000	293,000,000	13,000,000
LESS: Direct costs	241,000,000	252,000,000	11,000,000
Net F&A Recovery	39,000,000	41,000,000	2,000,000
II. General Income			
<b>Subtotal General Income</b>	3,763,000	3,707,000	(56,000)
III. Fund Balance, NR			
Unexpended Royalty Income	900,000	2,500,000	1,600,000
Fund Balance, NR	2,100,000	1,000,000	(1,100,000)
Subtotal Fund Balance, NR	3,000,000	3,500,000	500,000



### **Proposed FY2010 UKRF Budget**

	FY09 Approved Budget	FY10 Proposed Budget	Difference
TOTAL REVENUE	45,763,000	48,207,000	2,444,000
TRANSFERS & EXPENDITURES			
I. Transfers to General Fund			
Subtotal Transfers	20,286,100	20,852,590	566,490
II. Expenditures			
A. Operating & Admin	719,500	719,500	0
B. Other Activity	3,095,000	4,639,000	1,544,000
C. Research Programs	21,662,400	21,995,910	333,510
Subtotal Expenditures	25,476,900	27,354,410	1,877,510
Total Transfers & Expenditures	45,763,000	48,207,000	2,444,000