

# *BNC Overview*

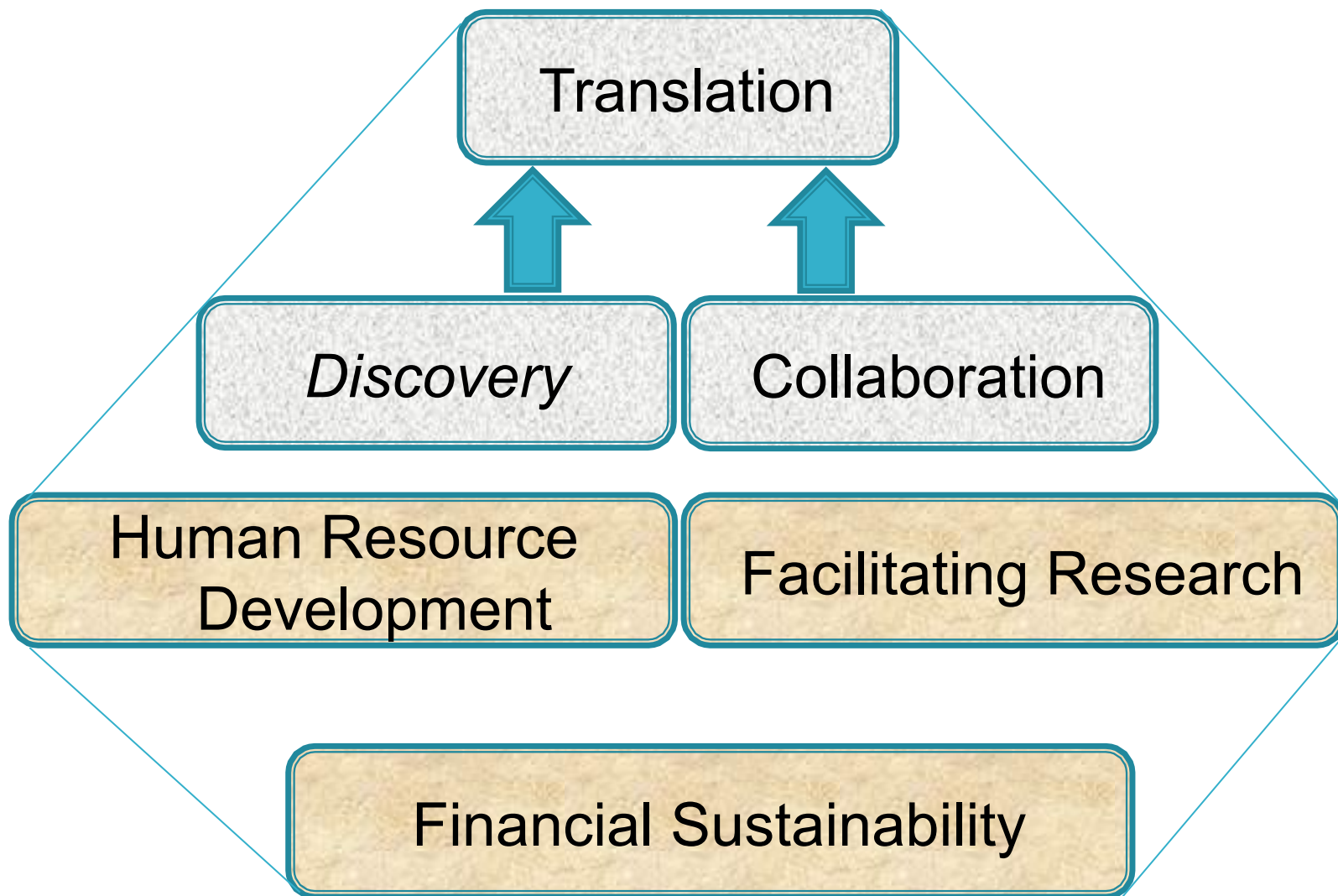
*Ali Shakouri  
Director, Birck Nanotechnology Center  
January 17, 2012*



# BNC Strategic Plan: Mission

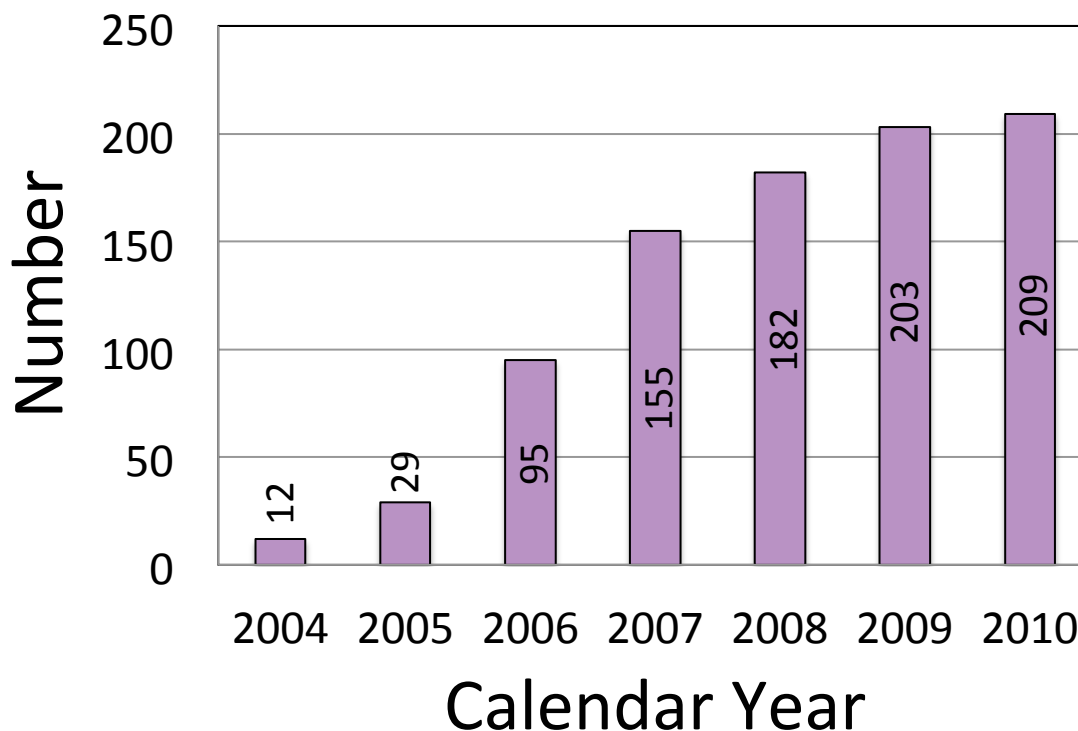
The BNC is a community of researchers who work in an environment that is free of disciplinary boundaries to understand and exploit phenomena unique to the nanoscale with the goal of solving problems and creating opportunities in the domains of *healthcare, information access, energy, security* and the *environment*.

# Ten-Year Vision



# Discovery-Key Metrics

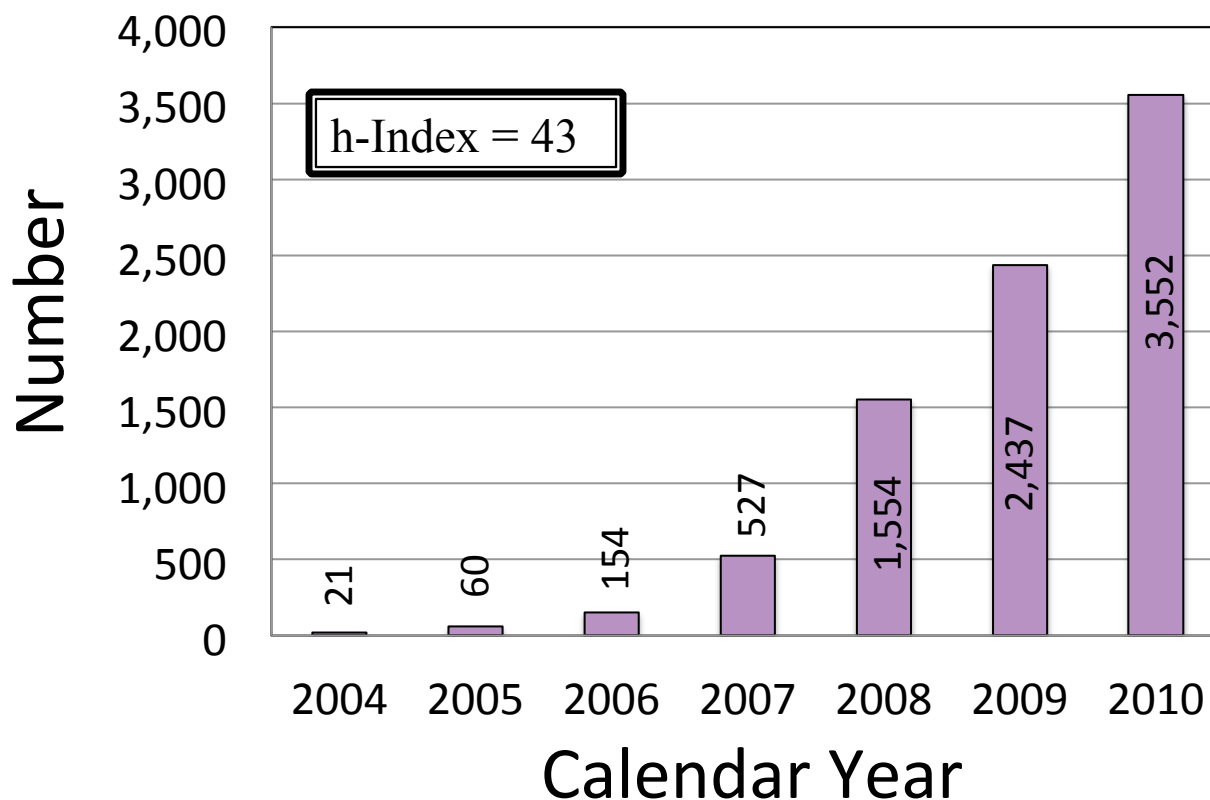
- Number of publications with BNC affiliation in SCI journals per calendar year.



*2007 Strategic Plan Milestone: 140 Publications by 2012*

# Discovery-Key Metrics

- Measure Scientific Impact: ISI h-index for BNC



*BNC 2012 Milestone:  $h\text{-index} > 30$*

# Financial Sustainability-Key Metrics

- Increase Annual research expenditures: Track Award data

Annual Research Expenditures	
2012-13 Milestone	\$25M
2007-2008 (Estimate by Tim Sands)	\$11M
2009-2010 (FY10)*	\$20M

- Increase Centers with Annual BNC expenditures >\$1M/yr

Externally Funded Centers	
2012 Milestone	≥3
BNC externally funded Centers	2

## Discovery-Key Metrics

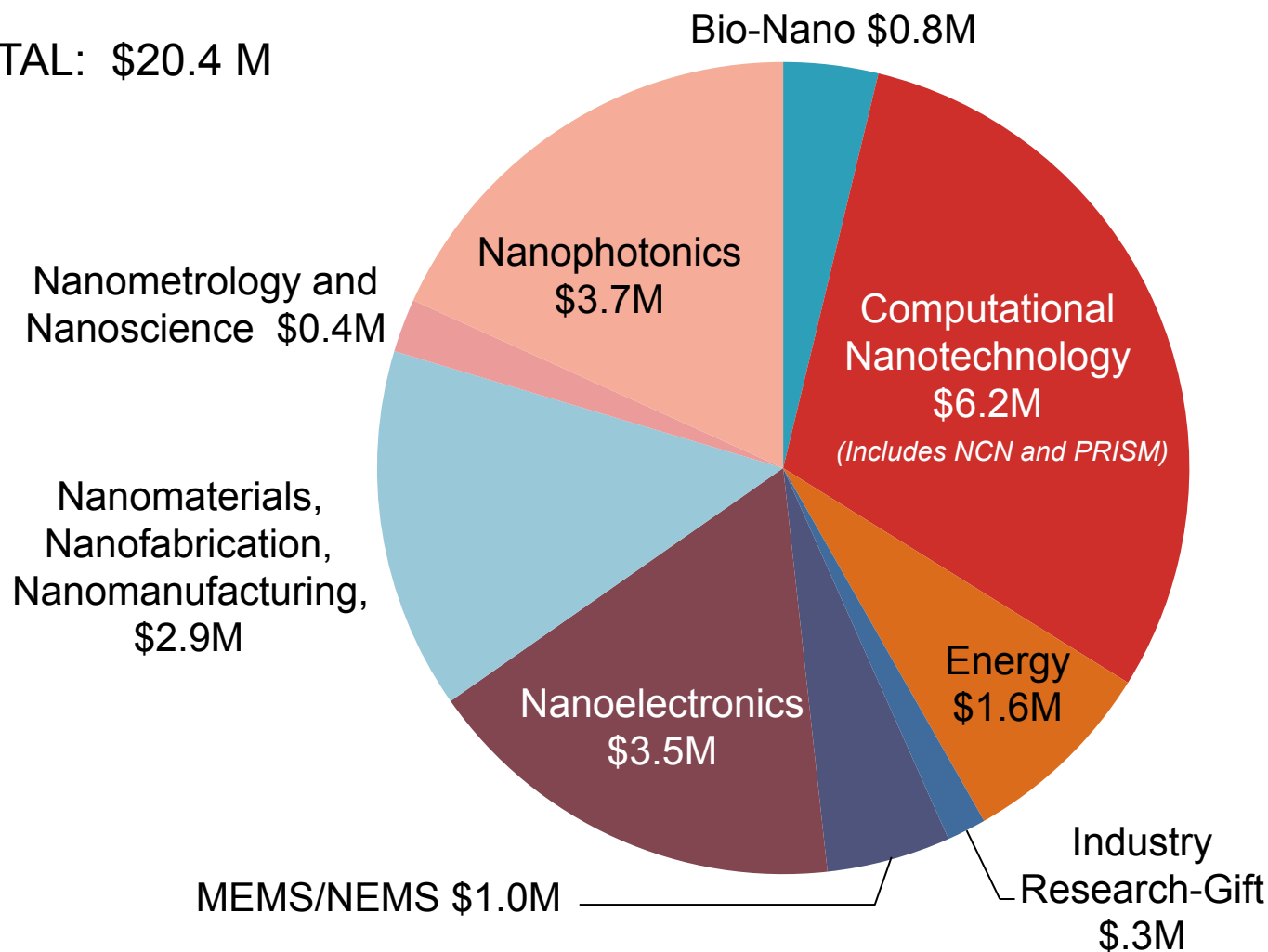
- Joint papers between Engineering and Science, as well as other entities at Purdue: 10-15 (goal 2012: 30/year)
- Joint papers by experimentalists and theorists: 5-15 (goal 2012: 30/year)

## Translation-Key Characteristics

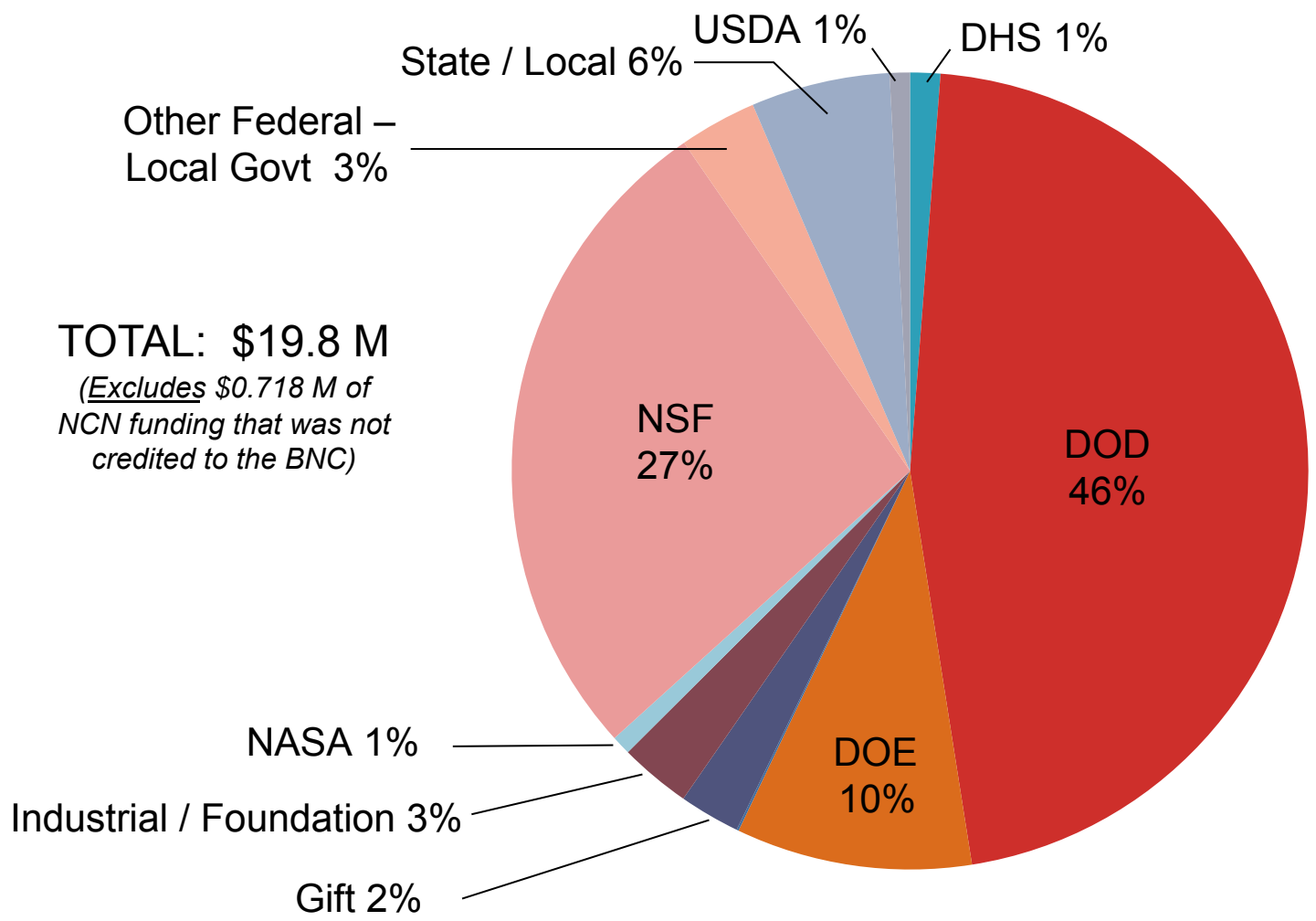
- *Invention disclosures and provisional patents: 19 / 15 (goal 2012: 30 / 15 per year)*
- *Patents granted / Licensed agreements 0-1 (goal 2012: 5 / 15 per year)*

## FY 2010 Purdue Nanoscale Funding Awards by Area

TOTAL: \$20.4 M

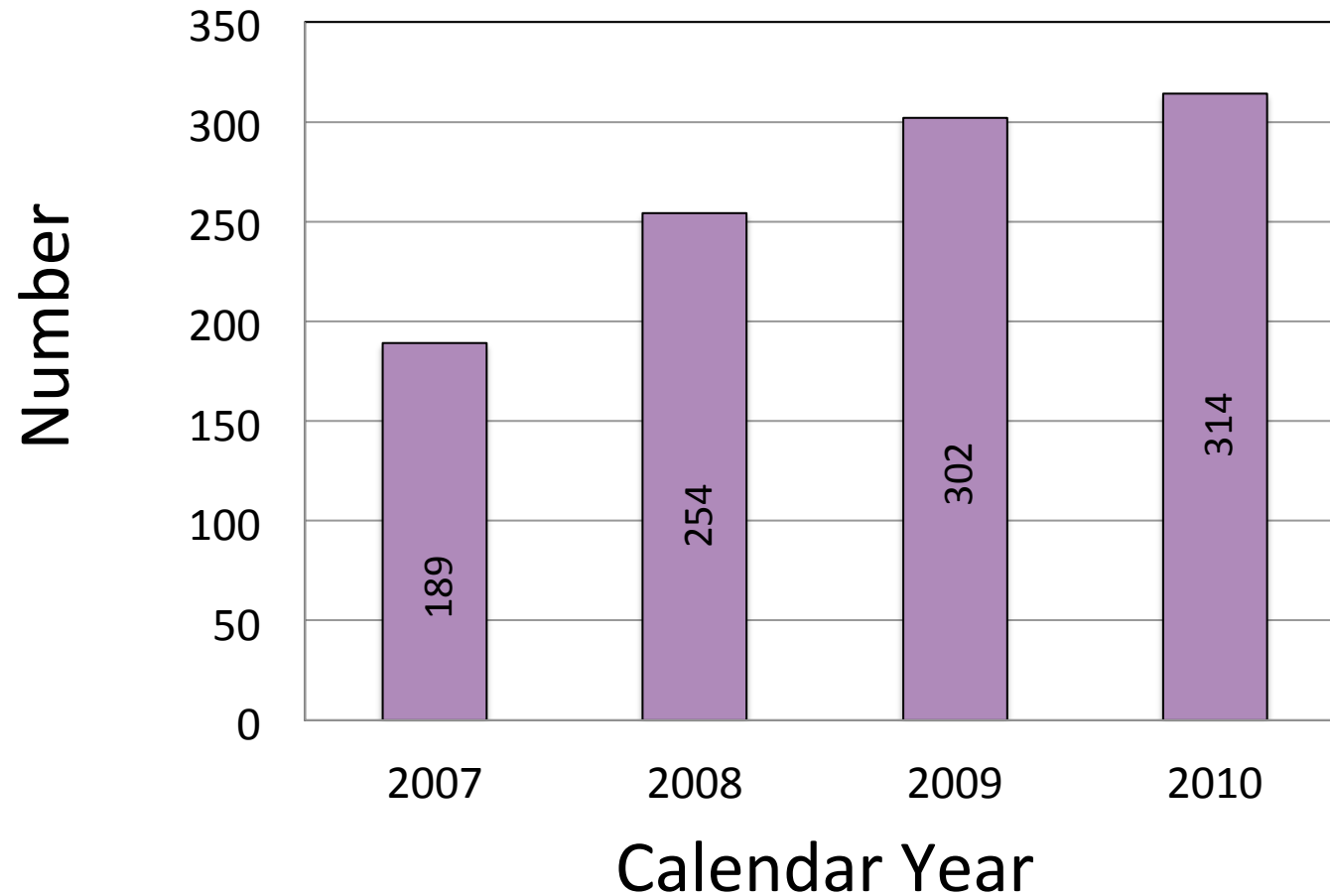


# FY 2010 BNC Nanoscale Funding Awards by Source

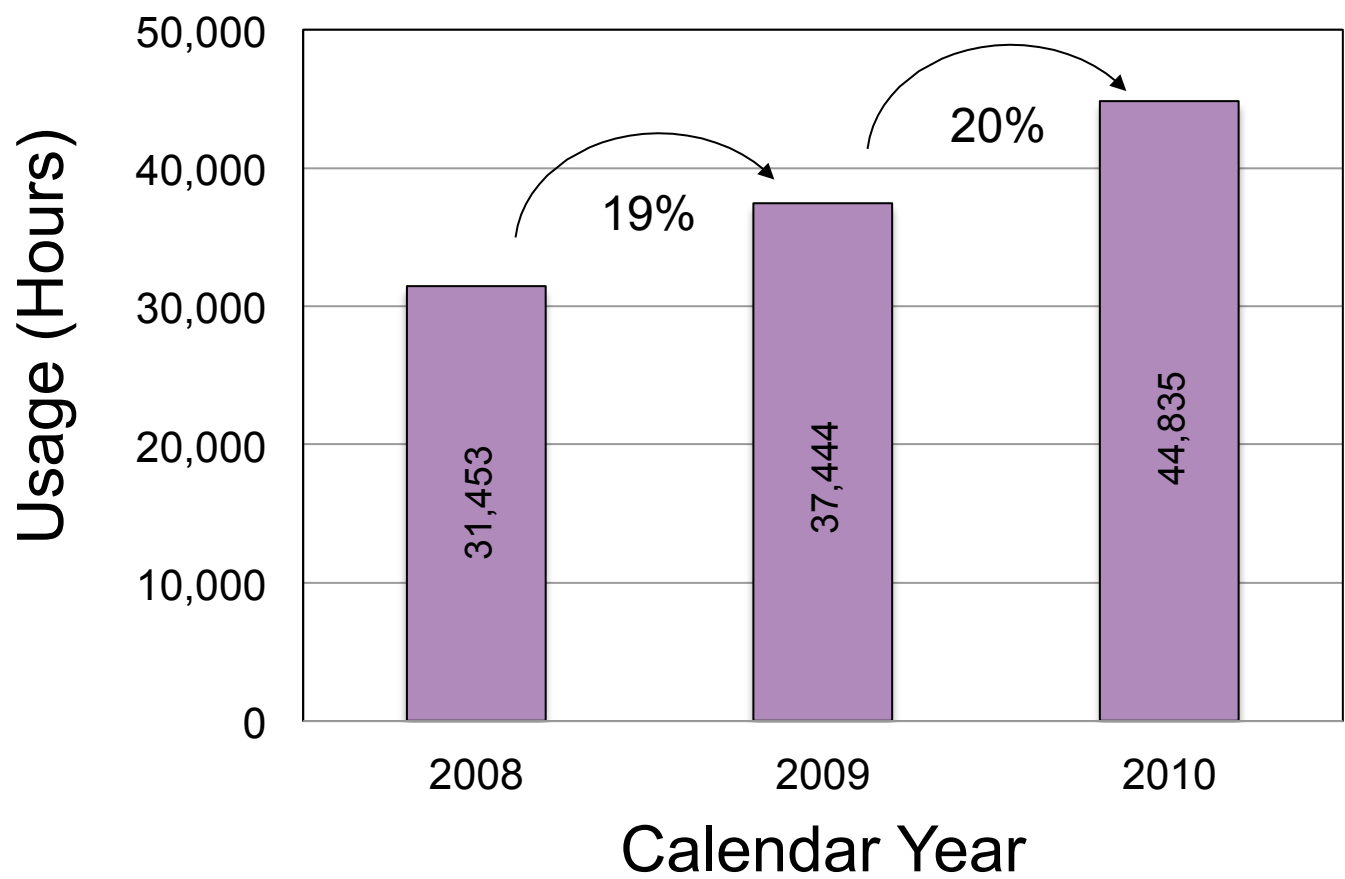


**TOTAL: \$19.8 M**  
*(Excludes \$0.718 M of NCN funding that was not credited to the BNC)*

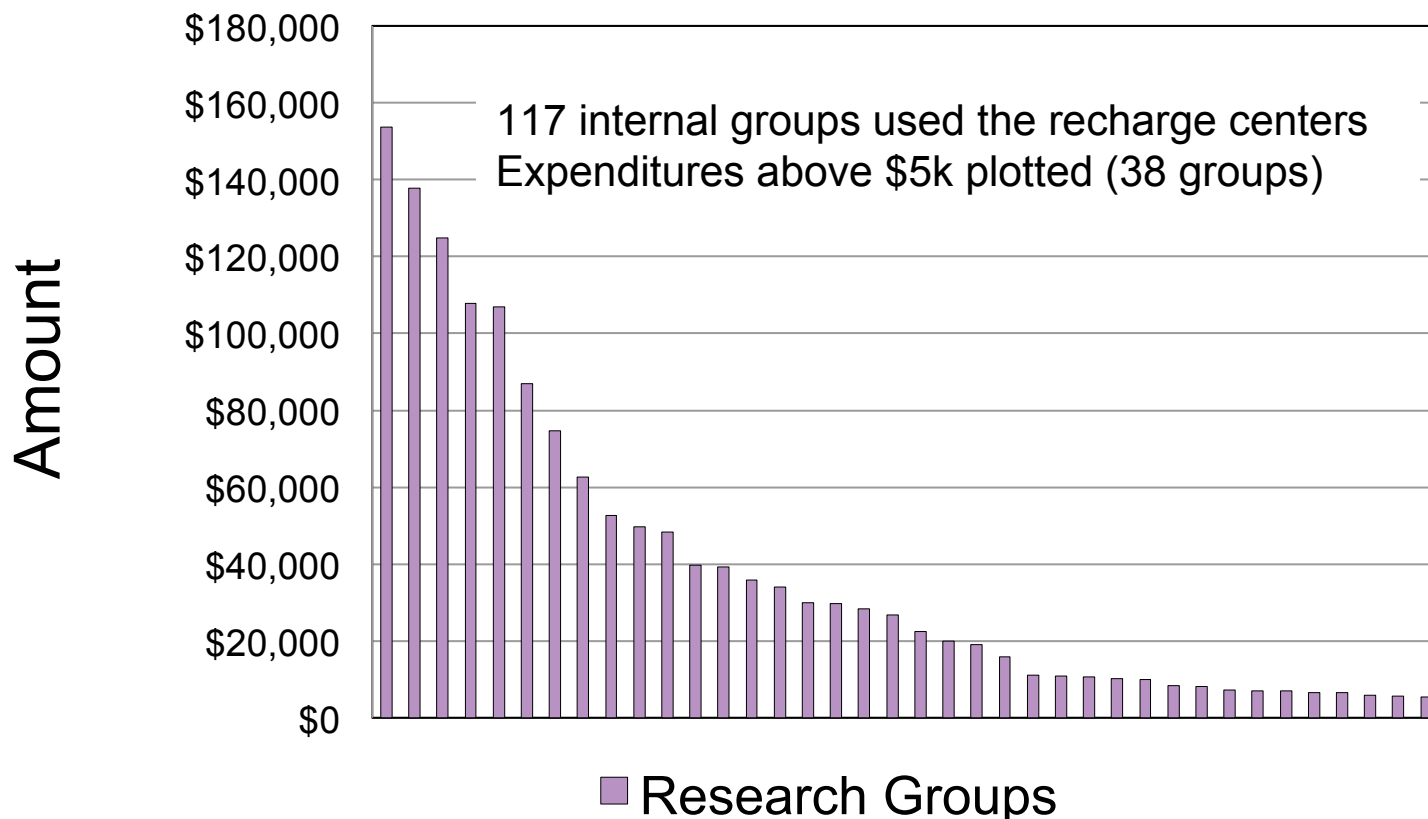
# Total Number of Users of SNL

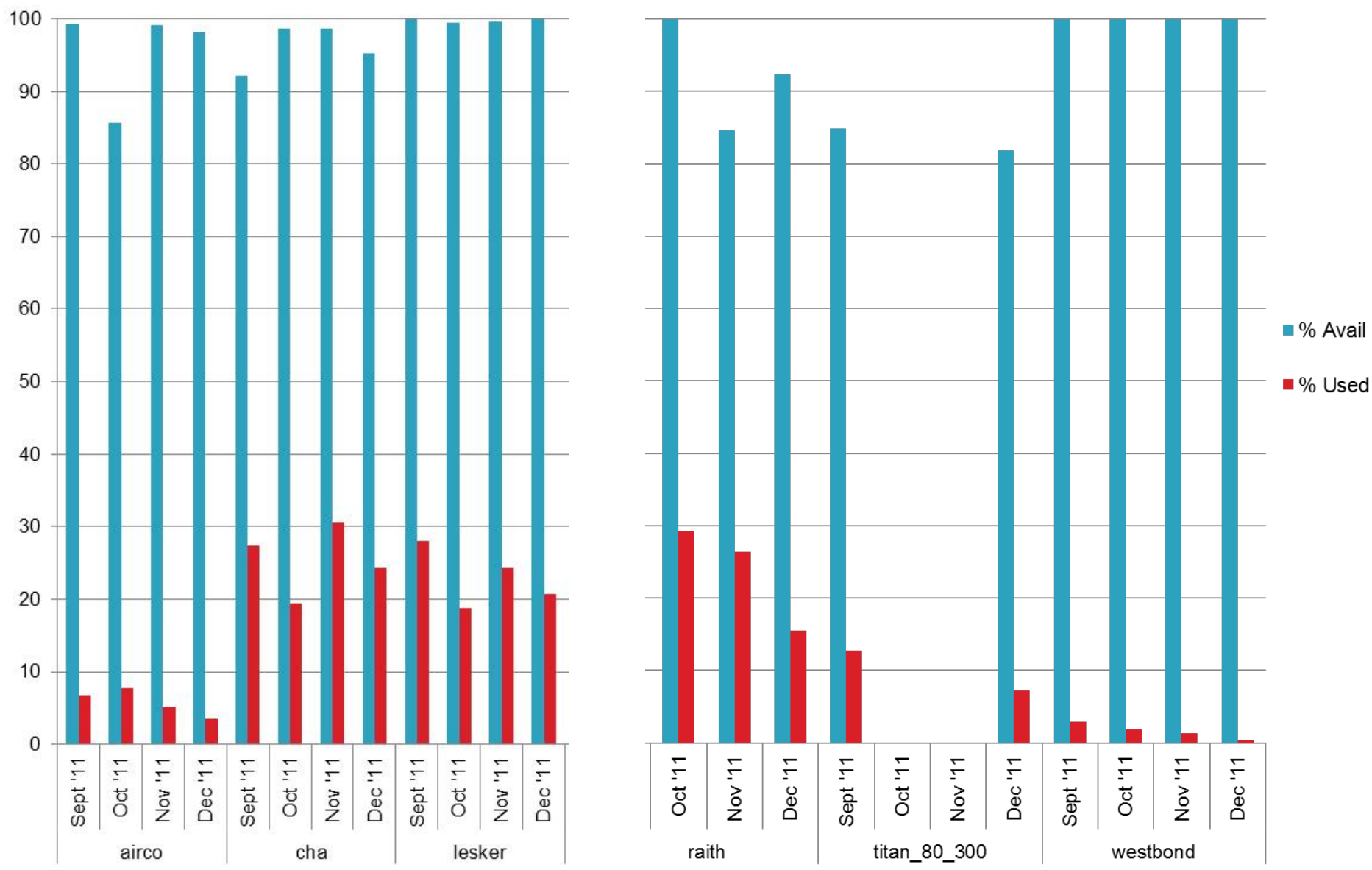


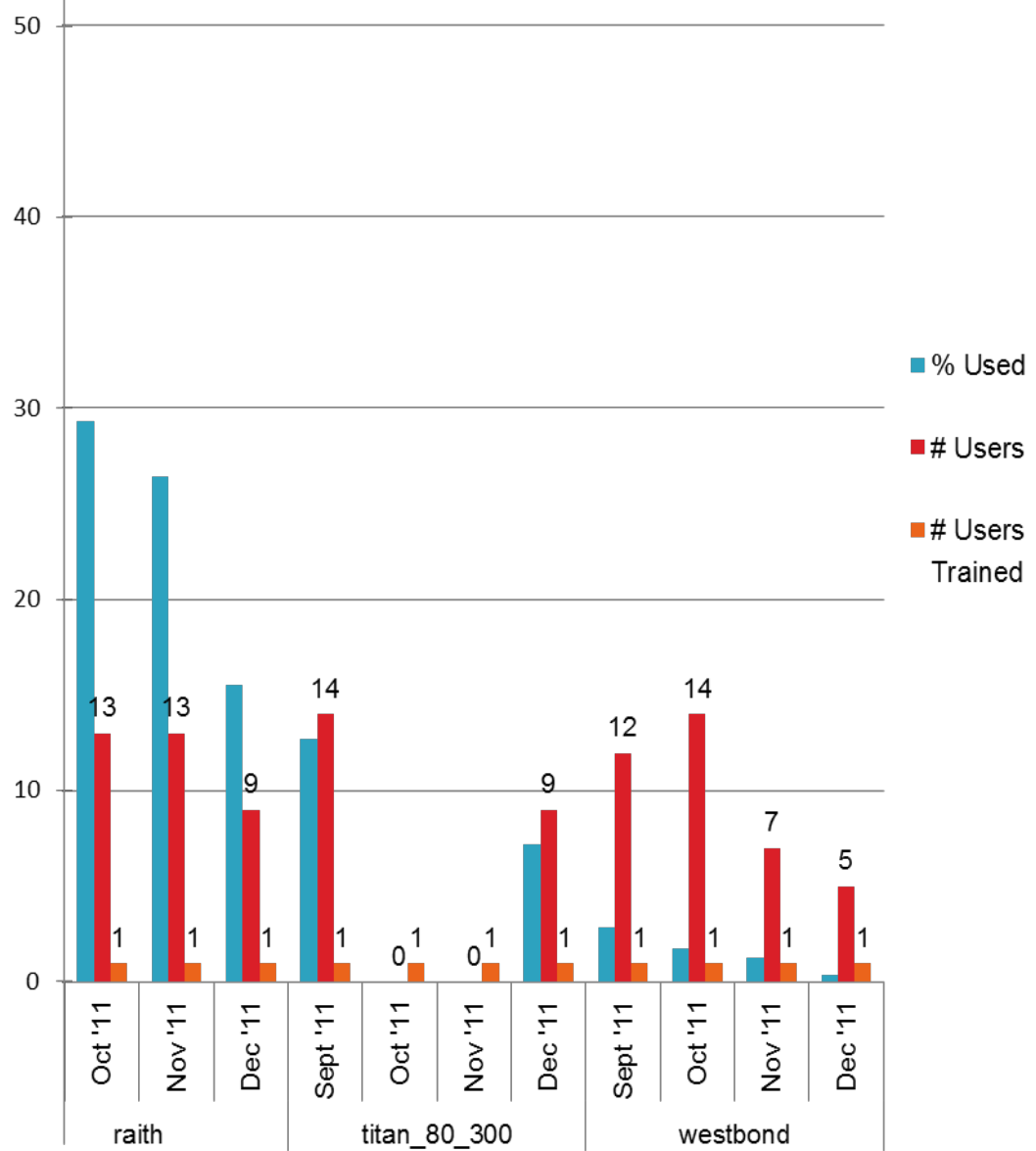
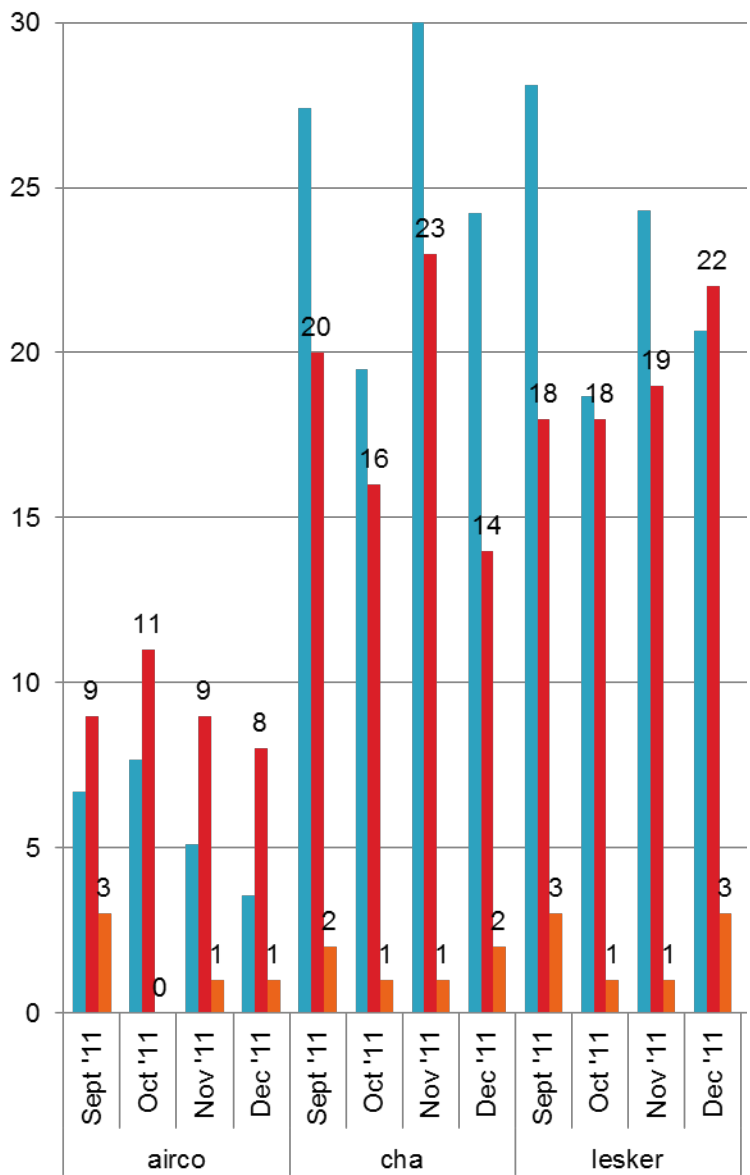
# Total BNC Equipment Usage



## FY 2010 Total Recharge Expenditures by Faculty Group







- Staff involvement in research
- Superusers
- Student presentation
- Nanofabrication course
- Retraining charges
- Major safety or citizenship violations
- Recharge billing