



Open Science Grid

OSG User Support Update

OSG Area Coordinators Call

Sept 24, 2014

Chander Sehgal - FNAL



Recent Accomplishments

- XD-Login node upgraded; new system has been performing well during its first two weeks (averaging >400K hours per day); demonstrated running at >20K cores simultaneously
- Worked with several sites to allow access for OSG VO; have successfully integrated Boston-U, Florida, Oklahoma
- Rationalized Field-of-Science designations in OIM for Open Facility projects to match NSF classification system
- Supported ~4 new project in the last 2 months in becoming active users of OSG
- Supported Campus Grids team in implementing “modules” software environment for users
- Started dialog with ACI-REFs project (Barr van Oehsen at Clemson) to identify more researchers who can use OSG



OSG Open Facility – Cores Used

VO frontend status - osg-flock-grid-iu-edu_OSG_gWMSFrontend

Group

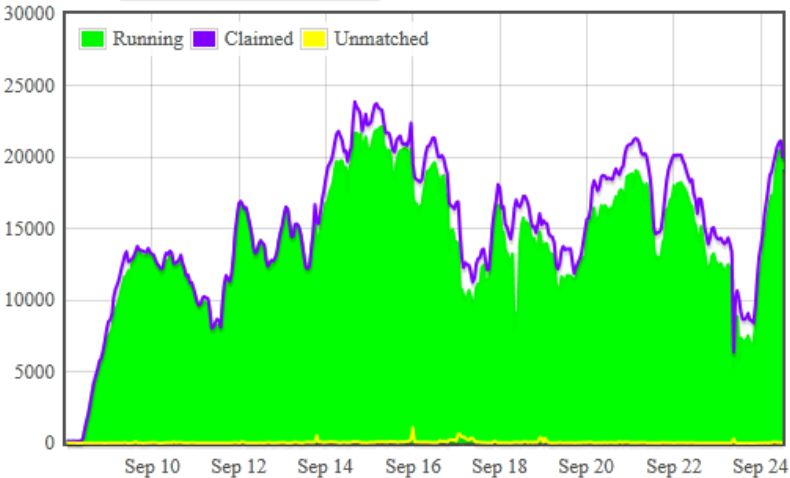
Factory

Info group ☒ Running ☐ Idle

☐ Autoupdate (30 mins)

RRD file

Resolution:



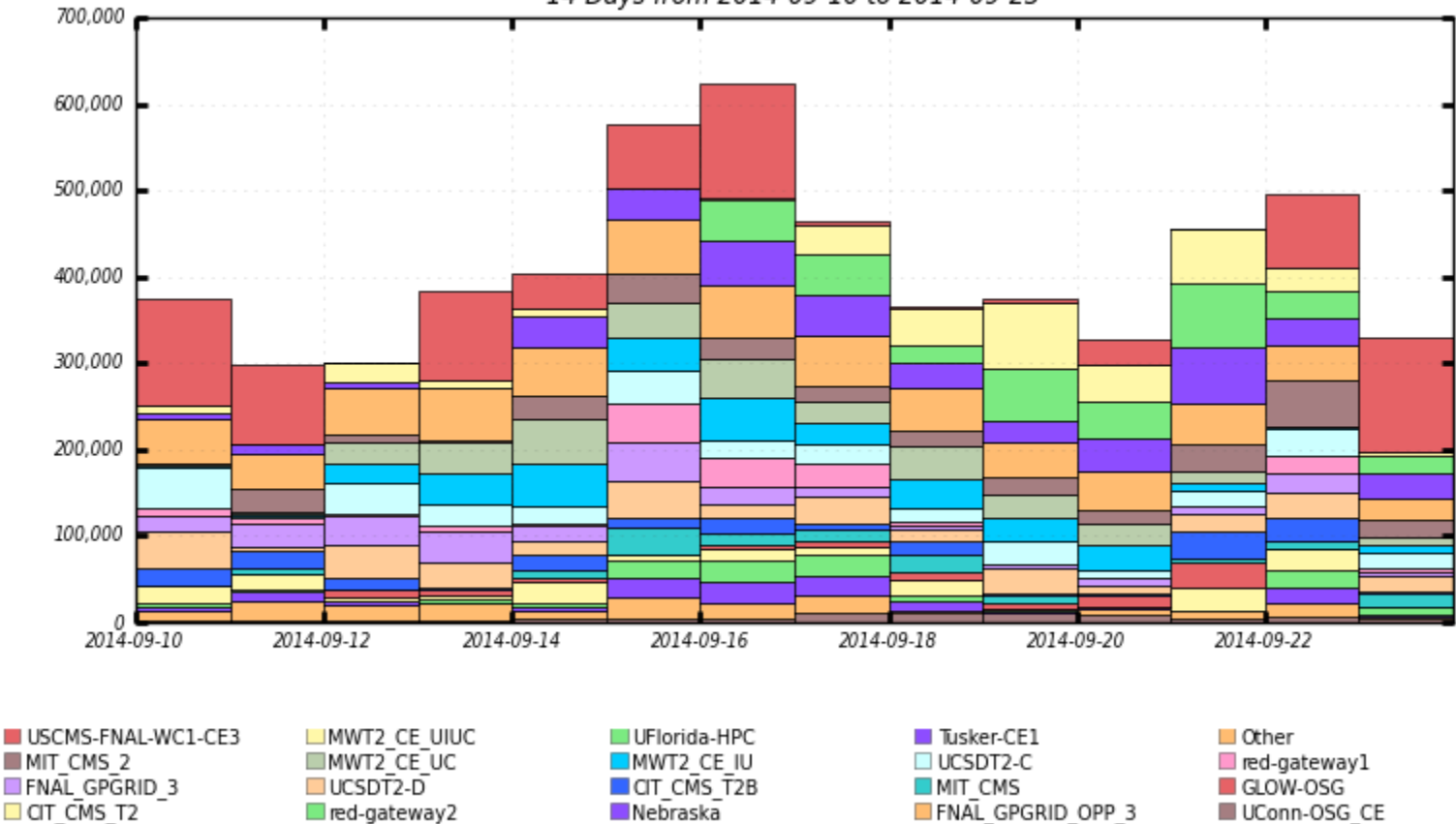
Select elements to plot:

- ☒ Running jobs
- ☐ Matched running
- ☐ Glideins at Collector
- ☒ Glideins claimed by jobs
- ☒ Glideins not matched
- ☐ Idle jobs
- ☐ Requested idle glideins
- ☐ ReqMaxRun



OSG VO Wall Hours

Hours Spent on Jobs By Facility
14 Days from 2014-09-10 to 2014-09-23



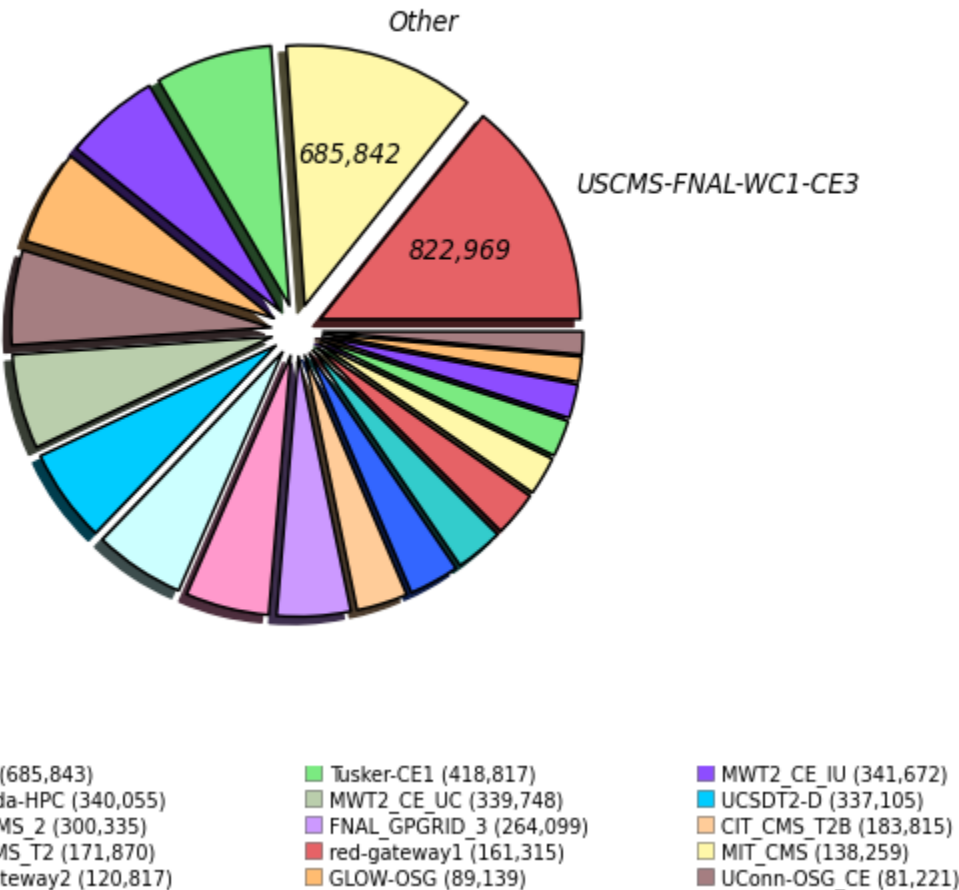
Maximum: 622,860 , Minimum: 297,892 , Average: 412,484 , Current: 329,690



OSG Project Wall Hours Usage

Wall Hours by Facility (Sum: 5,774,783 Hours)

14 Days from 2014-09-09 to 2014-09-23



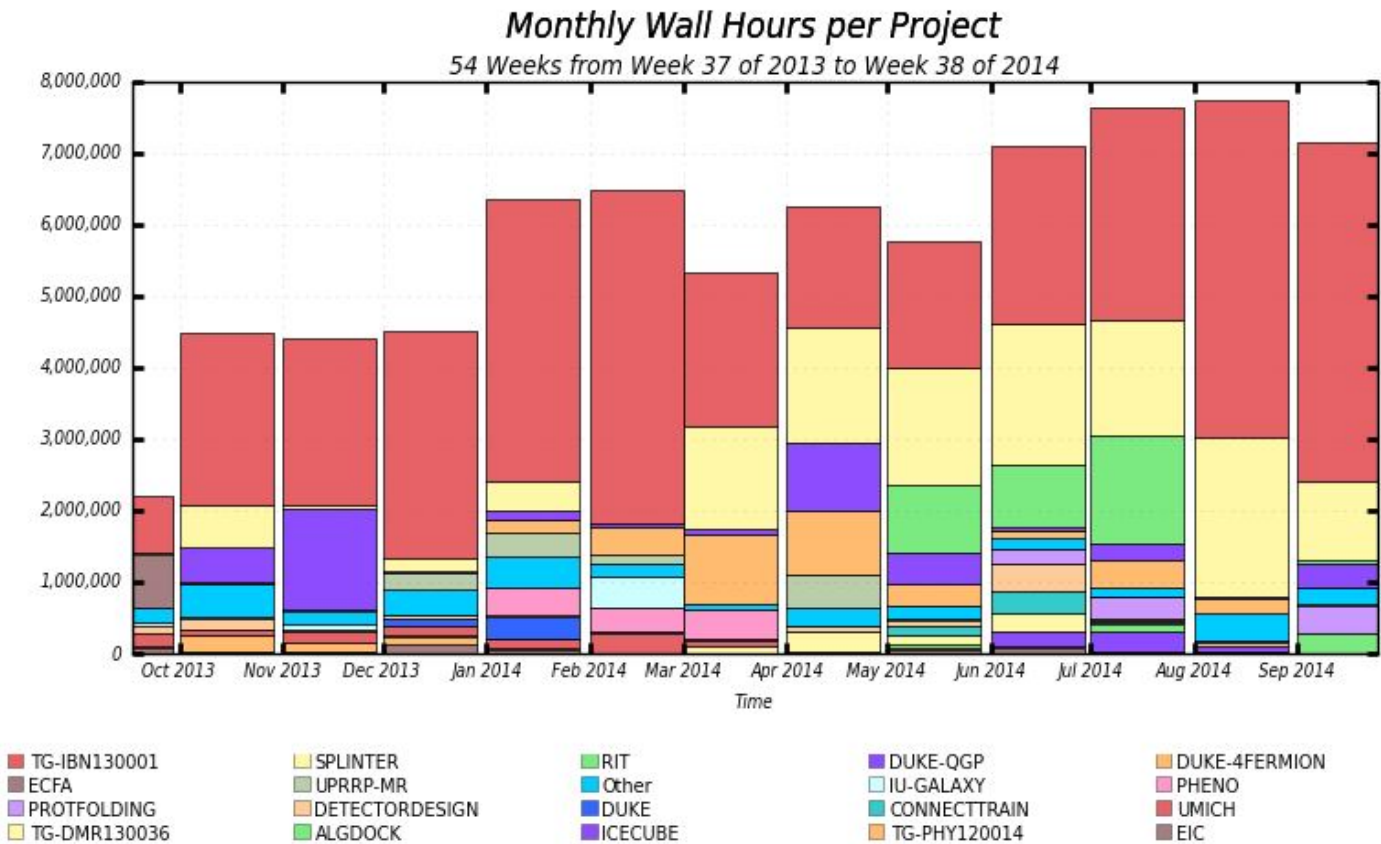


Key Initiatives

1. Effective service delivery for XSEDE Users of OSG. Identify and implement methods for growing XSEDE user base via XRACs (4 awards were issued at September 2014 XRAC meeting)
2. Research opportunistic eco-system and grow opportunistic pool; attempt to develop models of “currently available” capacity
3. Work with ACI-REFs project to identify more researchers
 - a. Introduce ACI-REFs staff to OSG (October)
 - b. Develop training on: 1) what work is good match for OSG; 2) how to construct jobs/workflows in OSG; 3) how to submit and monitor jobs; and 4) how to get data to/from the workflow.
 - c. Plan hands-on training in using OSG-Connect (December)
4. Support new communities who want to connect new sites to OSG; recent contacts from U-Washington and Simons Foundation.
5. Continue to assist Campus Grids team in building a more friendly software and execution environment for users of OSG-Connect



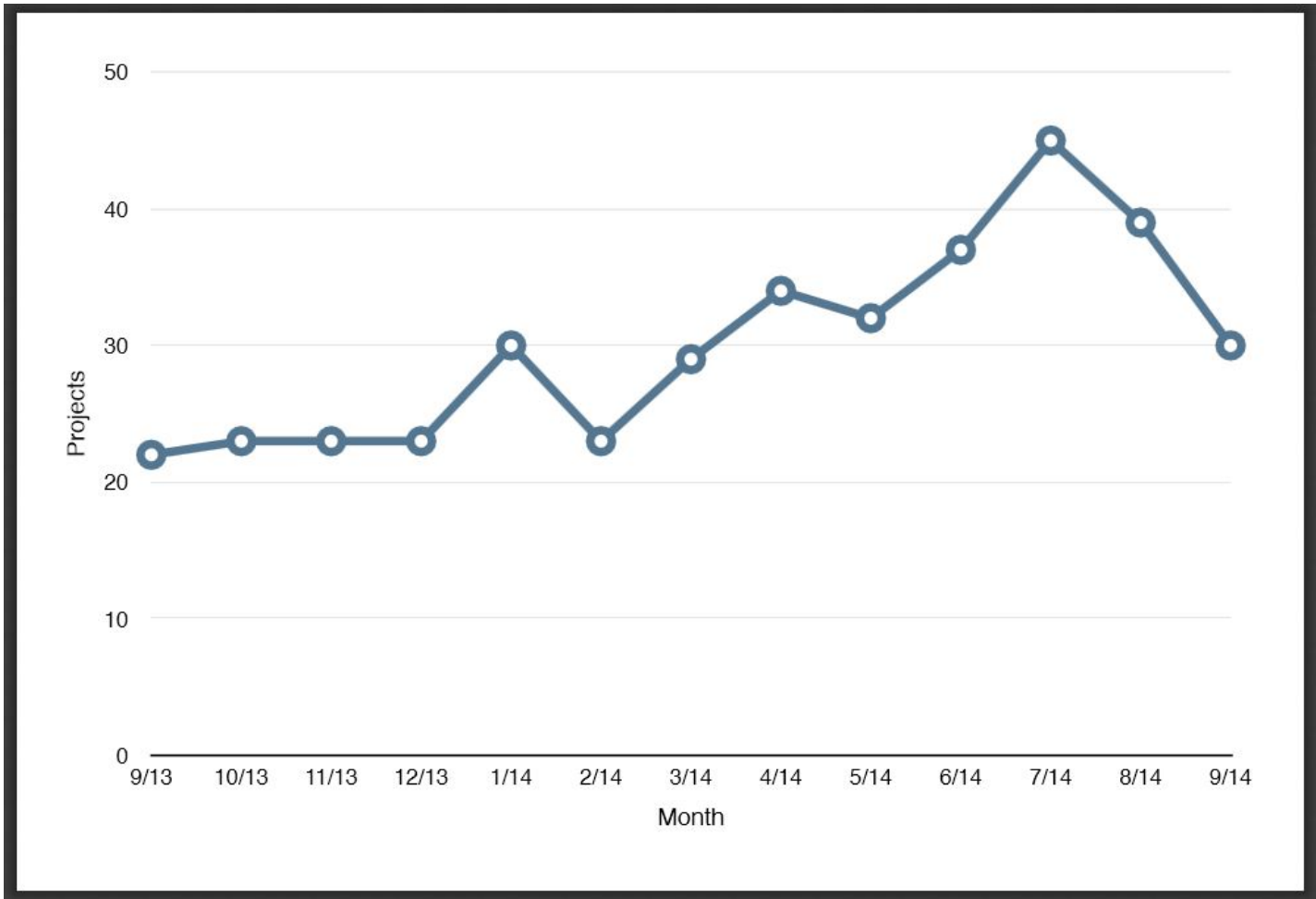
OSG Project Wall Hours Usage



Current usage rate is at 90-100M hours per year



OSG Projects active in last year



Is there a drop-off in active users?



Top Concerns

1. Need a better understanding of the OSG opportunistic eco-system and “optimal” methods to quantify and access these opportunistic resources
2. We need to do better at getting out the message to researchers who can benefit by having access to OSG DHTC

The machinery is in good shape; we need more users



User Support Team

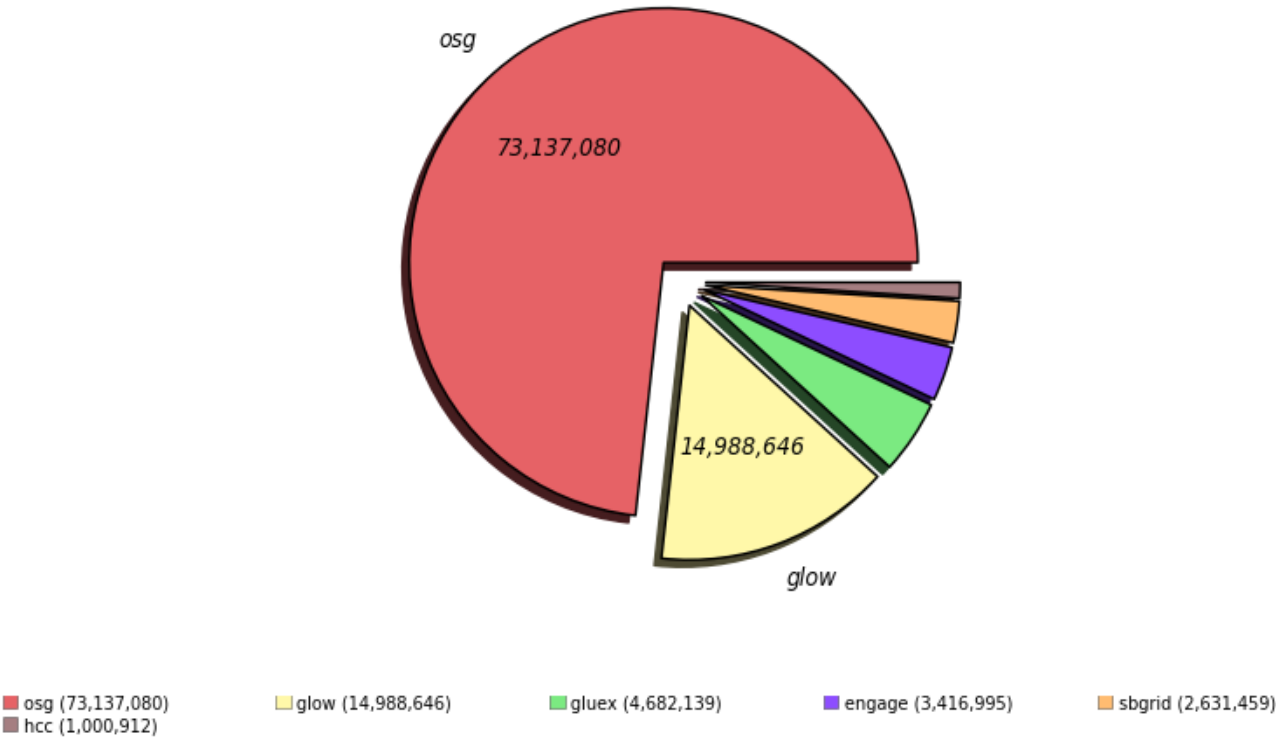
Name	Institution	%FTE
Alex Zaytsev	BNL	10%
Mats Rynge	ISI	50%
Emelie Harstad	Nebraska	50%
Marko Slyz	FNAL	60%
Tanya Levshina	FNAL	25%
Bo Jayatilaka	FNAL	75%
Chander Sehgal	FNAL	30%
TOTAL		3.0



OSG Opportunistic Eco-system

Usage by “opportunistic VOs” for 12 months ending 24-Sept-2014

Wall Hours by VO (Sum: 99,857,231 Hours)
52 Weeks from Week 39 of 2013 to Week 38 of 2014



Likely to reach 100M hours in the next week



OSG-Direct users Sept 2013 to Aug 2014

Project Name	PI	Institution	Field of Science	Wall Hours
BNLPET	Martin Purschke	Brookhaven National Laboratory	Medical Imaging	38,819
DeerDisease	Lene Jung Kjaer	Southern Illinois University	Biological Sciences	112,124
DetectorDesign	John Strologas	University of New Mexico	Medical Imaging	1,050,617
Duke-QGP	Steffen A. Bass	Duke University	Nuclear Physics	4,056,894
dVdT	Ewa Deelman	University of Southern California	Computer Science	4,980
ECFA	Meenakshi Narain	Brown University	High Energy Physics	1,365,556
EIC	Tobias Toll	Brookhaven National Laboratory	Accelerator Physics	513,402
HL-LHC-TP	Meenakshi Narain	Brown University	High Energy Physics	90,870
IU-GALAXY	Robert Quick	Indiana University	Bioinformatics	668,346
OSG-Staff	Chander Sehgal	Fermilab	Computer Science	29,397
P0-LBNE	Maxim Potekhin	Brookhaven National Laboratory	Physics - Neutrino	18,334
Pheno	Stefan Hoeche	SLAC	High Energy Physics	1,108,623
RIT	P. Stanislaw Radziszowski	Rochester Institute of Technology	Computer Science	3,339,488
SNOplus	Joshua R Klein	University of Pennsylvania	Physics - Neutrino	485
Snowmass	Meenakshi Narain	Brown University	High Energy Physics	764,971
SoyKB	Dong Xu	University of Missouri	Plant Biology	29,870
SPLINTER	Robert Quick	Indiana University	Medicine	11,803,852
UMich	Paul Wolberg	University of Michigan	Microbiology	1,186,316
UPRRP-MR	Steven Massey	Universidad de Puerto Rico; Rio Piedras Campus (UPRRP)	Bioinformatics	1,192,943
Total				27,375,888



OSG-XD users Sept 2013 to Aug 2014

Project Name	PI	Institution	Field of Science	Wall Hours
TG-CCR120041	Luca Clementi	San Diego Supercomputer Center	Computer and Computation Research	6
TG-CCR130001	Ruth Marinshaw	Stanford University	Other	2
TG-CDA100013	Mark Reed	University of North Carolina; Chapel Hill	Mathematical and Physical Sciences	6
TG-CHE130091	Paul Siders	University of Minnesota; Duluth	Chemistry	135,521
TG-CHE130103	Jeremy Moix	Massachusetts Institute of Technology	Chemistry	61,405
TG-CHE140094	John Stubbs	University of New England	Chemistry	118
TG-DEB140008	Robert Toonen	University of Hawaii; Manoa	Environmental Biology	4,106
TG-DMR130036	Emanuel Gull	University of Michigan	Materials Research	844,237
TG-IBN130001	Donald Krieger	University of Pittsburgh	Biological Sciences	33,834,882
TG-IBN130008	Jorden Schossau	Michigan State University	Biological Sciences	16,857
TG-IRI130016	Joseph Cohen	University of Massachusetts; Boston	Information; Robotics; and Intelligent Systems	90,938
TG-MCB090163	Michael Hagan	Brandeis University	Molecular Biosciences	50,274
TG-MCB100109	Lillian Chong	University of Pittsburgh	Molecular Biosciences	264,328
TG-MCB120070	Joseph Hargitai	Albert Einstein College of Medicine	Molecular Biosciences	378
TG-MCB140160	David Rhee	Albert Einstein College of Medicine	Molecular Biosciences	25
TG-OCE130029	Yvonne Chan	University of Hawaii; Manoa	Ocean Sciences	54,017
TG-PHY110015	Pran Nath	Northeastern University	Physics	37
TG-PHY120014	Qaisar Shafi	University of Delaware	Physics	640,743
TG-SEE140006	Sheila Kannappan	University of North Carolina; Chapel Hill	Other	46
TG-TRA120014	Pol Llovet	Montana State University	Cross-Disciplinary Activities	19,479
TG-TRA120041	Hanning Chen	George Washington University	Computer and Information Science and Engineering	231
Total				36,017,634