

Integrative Research Culture Workshop

August 19, 2016



COLORADO SCHOOL OF MINES

Research Task Force (TF) Initiatives: Current Status

Initiative	Current Status
Improve Graduate Student Quality	Showcased Mines to prospective grad students at Red Rocks in spring. RTT and Grad office discussing strategies for similar events. Identifying funding for named fellowships for top students.
Faculty Work Load Analysis	President Johnson has assigned this initiative to his team to establish and implement a new workload model.
Improve Faculty Mentoring	Research sessions were added to the Fall FY16 new faculty orientation. RTT office will host a series of brown bag sessions on research topics. Encourage all depts to have formal mentoring policy.
Reduction of Administrative Burden	2 ORA initiatives: Checkbook grant accounting being tested. New contracts administrator hired.
Interdisciplinary Research	TF will work closely with the Research Council Chair in the coming semester to kick start an initiative for hosting research conferences.
Create Grand Challenge Institutes	Discussions ongoing with faculty in several areas. Will need seed funding.

Recent Multi-Partner Initiatives

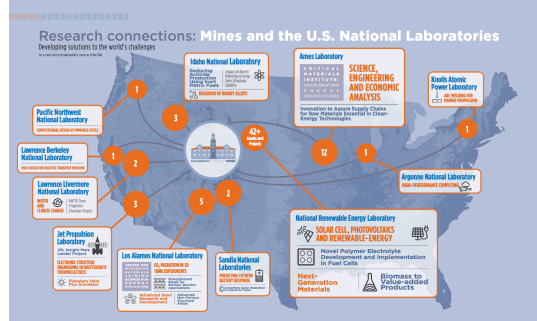
- Renewal of NSF ERC for Urban Water Center
- Alliance for Development of Additive Processing Technologies
- Light Weight Steels
- Carbon Materials for Wind Turbines
- Methane Emissions Reconciliation
- Critical Materials Institute
- Mines/NREL Partnership for International Center for Multiscale Characterization (ICMC)

Major Proposals In the Pipeline

- NSF ERC on Innovation for Carbon Capture, Utilization, and Storage
- NSF MRSEC on Center for Sustainable Materials for Energy (CSM-E)
- NNMI on Center for Process Intensification to Enable Renewables
- NNMI on Clean Energy Manufacturing Innovation Institute

Positioned to Address Major Scientific Challenges

- ☐ Strong connections with Federal Labs
- ☐ Close connections with Front Range Federal Labs
- ☐ Strong industry ties
- ☐ Increased international partnerships
- ☐ Commercialization activities and entrepreneurial outreach



Campus Workshops Held

- ☐ Water
- ☐ Catalysis
- ☐ Membranes
- ☐ Big Data

PI/Financial Manager Fund Balance Summary						
Marvin Blaster			Export report: PDF / Excel			
Grant	Sponsored Research (Inception to Date)	Start Date	End Date	Total Budget	Available Balance*	
400####	Hydrate Modeling and Flow Loop Expl...	9/1/14	8/31/17	\$ 300,000.00	\$	125,000.00
445####	Hydrate Kinetics Studies for the Hy...			##		##
450####	Hydrate Formatin in High Salinity			##		##
450####	Impacts of Inhibitors on Hydrates			##		##
460####	Establishing Industrial Guidelines/			##		##
460####	Hydrate Kinetics Studies for the Hy...			##		##
470####	Desalination by Hydrate Nucleation			##		##
470####	Investigations of the rheological p...			##		##
Fund Professional Development (Current Fiscal Year)				Available Balance*		
111####	Professional Development			\$	139,500.00	
111####	Other PD			\$	(500.00)	
Fund Research Development (Current Fiscal Year)				Available Balance*		
122####	Research Development			\$	10,600.00	
Fund Gifts (Current Fiscal Year)				Available Balance*		
500####	CTR Research PE Hydrate			\$	100,000.00	
510####	Center for Hydrate Research					##
*Includes all current Encumbrances				(Printed Date)		

Grant 400### Balance

Marvin Blaster

Description

Performance Period: IDC Rate:

Labor Costs

Account Pool

Salaries

Tuition

Fringe Benefits

Operational Costs

Account Pool

Travel

Subcontracts

Supplies/Materials Pool

Equipment

Indirect Costs

Grant 400###

Select Expense Period

Name: Marvin Blaster

Description: Dui aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur.

Performance Period: MM/DD/YY to MM/DD/YY

IDC Rate: N/A

Account Pool

Salaries

Tuition

Fringe Benefits

From Date to Date (DD/MM/YYYY to DD/MM/YYYY)

Export report: PDF / Excel

Account Pool

Salaries

Tuition

Fringe Benefits

Account Pool	Account	Description	Date	Document	Detail	Expense
Salaries	5201	Academic Faculty Salary	1/30/2015	08B2404	Blaster, Marvin	\$ 5,000.00
	5209	Graduate Student Stipend	1/30/2015	08B2404	Hammer, Jack	\$ 900.00
Tuition	5218	Hourly Student Help	1/30/2015	08B2404	Black, Jenny	\$ 130.00
	5201	Academic Faculty Salary	1/28/2015	08B2404	Blaster, Marvin	\$ 5,000.00
Fringe Benefits	5209	Graduate Student Stipend	1/29/2015	08B2404	Hammer, Jack	\$ 900.00
	5201	Academic Faculty Salary	1/30/2015	08B2404	Blaster, Marvin	\$ 1,246.67
Operational Costs	5209	Graduate Student Stipend	1/30/2015	08B2404	Hammer, Jack	\$ 900.00
	5209	Graduate Student Stipend	1/30/2015	08B2404	Black, Jenny	\$ 735.24
Account Pool	xxxx	Hourly Student Help	1/30/2015	08B2404	Smith, Sam	\$ 479.52
	xxxx	Academic Faculty Salary	1/30/2015	08B2404	Blaster, Marvin	\$ 479.52
Travel	xxxx	Graduate Student Stipend	1/30/2015	08B2404	Hammer, Jack	\$ 223.81
	xxxx	Academic Faculty Salary	1/30/2015	08B2404	Blaster, Marvin	\$ 1,246.67
Subcontracts	xxxx	Graduate Student Stipend	1/30/2015	08B2404	Hammer, Jack	\$ 990.99
	xxxx	Graduate Student Stipend	2/28/2015	08B2506	Black, Jenny	\$ 735.24
Supplies/Materials Pool	xxxx	Hourly Student Help	2/28/2015	08B2506	Smith, Sam	\$ 479.52
	xxxx	Academic Faculty Salary	2/28/2015	08B2506	Blaster, Marvin	\$ 1,246.67
Equipment	xxxx	Graduate Student Stipend	2/28/2015	08B2506	Hammer, Jack	\$ 990.99
	xxxx	Graduate Student Stipend	2/28/2015	08B2506	Black, Jenny	\$ 735.24
Indirect Costs	xxxx	Graduate Student Stipend	2/28/2015	08B2506	Smith, Sam	\$ 479.52
	xxxx	Graduate Student Stipend	2/28/2015	08B2506	Black, Jenny	\$ 1,000.00
						\$ 20,810.48

Return to 400### Balance Summary

(Printed Date)

Research Support Services (CCIT)

Data Management

- Data Management Plans (templates, tools and reviews)
- Best practices (storage structures, file naming, etc.)
- Data curation (institutional and external repositories)
- Help understanding funder requirements
- Metadata guidance

Consultations

- Evaluate storage options for researchers
- Communicate specific and general IT needs
- Connect researchers with other departments or individuals
- Help navigating IP (or connecting those needing IP help)
- Limited scripting help
- Educational talks for researchers or departments

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HPC Resources

- BlueM and Mio
- ~13,000 total compute cores
- Additional accelerator/GPU cores
- Code optimization
- HPC consultations
- Education

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Breakout Groups

- BO#1: Combining research centers into institutes
- BO#2: Accelerating buildup of intellectual property
- BO#3: Physical reorganization of research space on campus to achieve interdisciplinary research
- BO#4: Impediments to enhancing inter-institutional collaborations
- BO#5: Impediments to enhancing intra-institutional collaborations