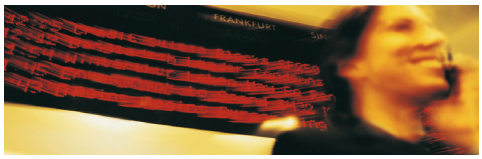
NEW MEXICO
Cyberinfrastructure Day

MARCH 10 & 11 2008

NEW MEXICO HIGHLANDS UNIVERSITY
SALA DE MADRID BLDG.
LAS VEGAS, NEW MEXICO 87701



- Cyberinfrastructure (CI) Learning and Education
- Instruments and Sensors
- Digital Assets
- Information Assurance
- Analytics and Visualization
- CI Arts & Humanities
- Organization & Connectivity

The intention of CI Days is to develop a "cultural community that supports peer-to-peer collaboration and new modes of education based upon broad and open access to leadership computing; data and information resources; online instruments and observations; and visualization and collaboration services."

Dr. Arden L. Bement, Jr., Director of National Science Foundation.

SPONSORS

University of New Mexico
New Mexico Highlands University

THE GOAL OF THIS CONFERENCE IS TO BRING TOGETHER USERS AND SUPPLIERS OF CYBER INFRASTRUCTURE TO FIND SOLUTIONS FOR BOTH NATIONAL AND LOCAL NEEDS THAT SUPPORT NEW MEXICO.

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

NEW MEXICO

Dear Colleagues:

I am pleased to welcome each of you to Las Vegas, New Mexico and to the campus of New Mexico Highlands University for this very valuable and informative Cyberinfrastructure conference.

Cyberinfrastructure will no doubt change how we interact with the next generation of technologies in the areas of educational system(s), global economies, and specifically within the liberal arts and classical studies disciplines. It is my hope that this conference will enable you to find new solutions, ideas, or a better way of unlocking and tackling present-day technology hurdles, while increasing opportunities for advancement. This is an exciting time in our history. The world of technology continues to evolve and produce widespread change and innovation, and I applaud all of you who bring your talent and leadership skills to the process.

This conference's agenda is packed with various informative presentations done by names you will recognize and offers numerous opportunities to exchange ideas and collaborate with local, regional, and national peers. We at Highlands are both fortunate and proud to be hosting this conference this year.

I hope you enjoy your stay in Las Vegas. If we can be of any assistance, please do not hesitate to contact Max Baca or any of us here at New Mexico Highlands University.

Sincerely,

James Fries, Ph.D.
President
New Mexico Highlands University

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

Cyberinfrastructure Day

Monday March 10, 2008		
Time	Agenda Item	Presenter(s)
10:00	Welcome	Max Baca, NMHU CIO & NMTIE President Alex Ramirez, MSI-CIEC
10:30	Cyberinfrastructure for learning and education. (A pre-meeting mini-workshop on a topic of critical importance to our institutions.)	Bob Panoff, Shodor Education Foundation
12:00	Lunch with Introduction and Campus Welcome	Dr. James Fries, President NMHU Alex Ramirez and Max Baca
1:00	Cyberinfrastructure for New Mexico: What are we talking about? CI NM with NMCAC	Tim Thomas, UNM
1:20	Overview of CI and its breadth of applications	Geoffrey Fox, IU
1:40	Introduction to CI Organizations	Russ Hobby, Internet2, IRNC
2:00	Science "Gateways"	Nancy Wilkins-Diehr, SDSC
2:30	Opening Discussion	Amelia Rouse
3:00	Break (15 min) with snacks	
	Elements of technology...	
3:15	Instruments and Sensors	Renee Brown, UNM & Sevilleta LTER

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

NEW MEXICO

3:45	Digital Assets (I.P.) Repositories	Johann Van Reenen, UNM
4:15	Information Assurance and Security in Grids	Barney Maccabe, UNM
4:45	Analytics and Visualization	Kelly Gaither, TACC
5:15	Open Brief Discussion	Amelia Rouse
6:00	Break	
6:30	Reception	
7:30	Dinner on your own	

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

Cyberinfrastructure Day

Tuesday March 11, 2008		
8:00	Continental Breakfast	
8:30	Reconvene & Review of the Day	Amelia Rouse
	Arts & Humanities:	
8:40	21st Century Relevance: GridJam	Jack Ox, NM & GridJam
9:10	Open Brief Discussion	
	Cyberinfrastructure... the Supply:	
	Organizational and Connectivity Resources...	
9:30		Russ Hobby, Internet2
		Alex Ramirez, MSI-CIEC
		Garrett Sern, EDUCAUSE
10:00	Break	
	Organizational and Connectivity Resources...	
10:15		Mats Rynge, OSG
		Diane Baxter, TeraGrid & SDSC
		Joe Lappa, NLR
10:45	CHECSnet	Max Baca, NMHU, Shaun Cooper, NMSU

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

NEW MEXICO

Existing and Developing Local Resources		
11:00	New Mexico Computing Applications Center	Tom Bowles / Bill Feiereisen
11:20	Innovation Centered Design of Science and Technology Collaboration: Bringing Scientist into the CI Mix	Deana Pennington, UNM & SciDesign
11:40	Open brief discussion	Amelia Rouse
12:00	Lunch with interaction	
1:00	DineGrid	Tom Davis, NTC
1:20	New Mexico State University	Dr. Shaun Cooper, NMSU
1:40	New Mexico Tech	TBD
2:00	University of New Mexico	Tim Thomas
2:20	Discussion Around Above and other NM Resources	Amelia Rouse
2:40	Cyberinfrastructure... The Demand and the Gap: (a facilitated discussion) Oriented toward closing the GAP between CI supply and DEMAND. How can We use CI to enhance its research & education capabilities: Setting strategic directions	Amelia Rouse
5:15	Wrap-up: Next Steps and Action Items (i.e. assignments, legislation, dissemination of information, etc)	Amelia Rouse / Alex Ramirez / Max Baca
6:00	Adjourn	

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

Cyberinfrastructure Day

Presenters Bio

Alex Ramírez, Ph.D. , Executive Director for Information Technology Initiatives

Hispanic Association of Colleges and Universities (HACU)
8415 Datapoint Drive, Suite 400
San Antonio, Texas 78229
aramirez@hacu.net (210)576-3227

Alex Ramírez is the Executive Director for Information Technology (IT) Initiatives at the Hispanic Association of Colleges and Universities (HACU), the only national association of Hispanic-Serving Institutions (HSIs). Dr. Ramírez has been in the IT field for over 20 years, 15 at the University of California, Riverside, becoming the Director of Academic Computing, before joining the University of Texas at San Antonio and then HACU. While at HACU he served as the HSI Community Leader for the NSF Advanced Networking with Minority Serving Institutions (AN-MSI) project in strategic partnership with EDUCAUSE and the American Indian Higher Education Consortium (AIHEC) and the National Association for Equal Opportunity in Higher Education (NAFEO), who respectively represent the nation's Tribal Colleges and Universities (TCUs) and Historically Black Colleges and Universities (HBCUs) and predominantly Black institutions. Together HACU, AIHEC and NAFEO represent over 330 institutions, the vast majority of the nation's Minority-Serving Institutions (MSIs). This strategic partnership has grown in the CI-TEAM demonstration project, MSI Cyberinfrastructure (CI) Institute (MSI-CI2), and its implementation project, MSI CI Empowerment Coalition (MSI-CIEC) which seeks to meaningfully engage MSIs in CI through collaborations for the betterment of MSIs, the students they serve, and the international cyberinfrastructure community. Alex is a co-PI on both and senior personnel on a related Broadening Participation in Computing (BPC) grant, the Computing Alliance of HSIs, CAHSI. He has spoken at national conferences on IT in the HSI community, and has prepared testimony on behalf of HACU on IT issues for congressional committees and commissions as well as for the NSF Blue Ribbon Panel on Cyberinfrastructure.

Bob Panoff, The Shodor Education Foundation, Inc.

rpanoff@shodor.org (919) 530-1911

Robert M. Panoff is founder and Executive Director of The Shodor Education Foundation, Inc., and has been a consultant at several national laboratories. He is also a frequent presenter at NSF- sponsored workshops on visualization, supercomputing, and networking, and continues to serve as consultant for the education program at the National Center for Supercomputing Applications at the University of Illinois at Urbana-Champaign. He has served on the advisory panel for Applications of Advanced Technology program at NSF. Dr. Panoff received his B.S. in physics from the University of Notre Dame and his M.A. and Ph.D. in theoretical physics from Washington University in St. Louis, undertaking both pre- and postdoctoral work at the Courant Institute of Mathematical Sciences at New York University. In 2005 Wofford College awarded Dr. Panoff the honorary degree of Doctor of Science in recognition of his leadership in computational science education.

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

NEW MEXICO

Geoffrey C. Fox, Community Grids Lab

gcf@indiana.edu (812) 856-7977

Geoffrey Charles Fox received a Ph.D. in Theoretical Physics from Cambridge University and is now professor of Computer Science, Informatics, and Physics at Indiana University. He is director of the Community Grids Laboratory of the Pervasive Technology Laboratories at Indiana University. He previously held positions at Caltech, Syracuse University and Florida State University. He has published over 550 papers in physics and computer science and been a major author on four books. Fox has worked in a variety of applied computer science fields with his work on computational physics evolving into contributions to parallel computing and now to Grid and multicore chip systems. His interest in education includes Internet delivery of courses and development of new curricula for interdisciplinary studies. He has worked on the computing issues in several application areas – currently focusing on Defense, Earthquake and Ice-sheet Science and Chemical Informatics. Parallel computing on multicore chips is a major research focus. He is currently Vice President of the Open Grid Forum responsible for eScience. He is involved in several projects to enhance the capabilities of Minority Serving Institutions (MSIs) including three funded by National Science Foundation (NSF) CI-TEAM playing a lead role in the MSI Cyberinfrastructure Empowerment Coalition (MSI-CIEC). His role in these is linking MSI's to the international Grid and computational science communities.

Russ Hobby , Chief Technical Architect , Internet2

rdhobby@internet2.edu (530)863-0513

Russ Hobby is the Chief Technical Architect of the End-To-End Performance Initiative for Internet2. Russ has long been active in the research and application of networking participating in the development of the Internet from its early days. He was one of the primary network architects that developed the Bay Area Regional Research Network (BARRNet), the NSF funded regional network serving Northern California in the late '80s and early '90s. In the Internet Engineering Task Force (IETF) Russ formed and chaired the Working Group responsible for the Point-to-Point Protocol (PPP). He served on the first IETF Internet Engineering Steering Group (IESG) as the Applications Area Director. Under his direction on the IESG, Internet standards were developed for multimedia email (MIME), real-time protocols to support applications such as desktop conferencing and some of the framework for what has become the World Wide Web. Russ worked with the group that lead to the creation of the Internet2 Project. He participated in the formal creation of Internet2 and co-authored the Internet2 Architecture and Engineering documents. He has continued to work closely with the Internet2 Project and is currently on assignment to Internet2 from his home campus University of California, Davis, to help with Working Group procedures and to assist the Engineering Area. He has helped lead California's part of Internet2 through his role in the Corporation for Education Network Initiatives in California (CENIC) and its CalREN-2 network.

Kelly Gaither, Ph.D. , Associate Director, Research and Development , TACC,

kelly@tacc.utexas.edu (512)471-8957

Kelly Gaither is associate director of Data & Information Visualization and Analysis at the Texas Advanced Computing Center. Her research interests include remote visualization, feature detection, large data visualization techniques and visualization applications. Dr. Gaither's current projects include feature detection techniques, real-time rendering of complex time-dependent data set and remote and collaborative visualization.

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

Cyberinfrastructure Day

Garret Sern, Government Relations Officer, EDUCAUSE

gsern@educause.edu (202) 331-5365

Garret Sern is a Policy Analyst for EDUCAUSE, analyzing and reporting to its membership on a wide-range of federal IT and networking policy issues. He is also staff liaison for the Net@EDU Broadband Policy and StateNets Working Groups, which collaborate in communicating the need for a visionary broadband strategy before state and federal policymakers. Garret works closely with other like-minded associations, including the liaison for the Higher Education Information Technology Alliance, a coalition of higher education and library associations working to coordinate their efforts on federal IT policy issues. Prior to EDUCAUSE, Garret worked for FARNET, the Federation of American Research Networks. He also has five years experience working for Bell Atlantic (now Verizon) in directory publishing. Garret is an alumnus of Loyola College in Maryland, and the American University where he earned an MA in International Communication.

Thomas J. Bowles Governor Richardson's Scientific Adviser.

Thomas.Bowles@state.nm.us (505) 476-2244

In his role as science adviser to the governor, Bowles provides counsel and assistance to Governor Richardson and members of the state government on science and technology matters.
Named the Los Alamos National Laboratory's Chief Science Officer (CSO) in July 2004, Bowles was responsible for enhancing theoretical and experimental science throughout the laboratory. Bowles came to the CSO position from research and management in the Laboratory's Physics Division. Bowles came to Los Alamos in 1979 after working as a postdoctoral position at Argonne National Laboratory, and shortly thereafter founded the Laboratory's interaction physics effort. Under Bowles' direction, that effort has established Los Alamos as a world leader in non-accelerator nuclear and particle physics. He earned his bachelor's degree in physics and mathematics from the University of Colorado and received his doctoral degree in physics from Princeton University in 1978.
Elected as an American Physical Society Fellow in 1993 and made a Los Alamos Fellow in 1994, Bowles was made an affiliate professor at the University of Washington in 1995. Bowles received a Laboratory Distinguished Performance Award in 2000 for his work on the Ultra-Cold Neutron program. In 2003, the Institute for Nuclear Research of the Russian Academy of Sciences honored him with the M.A. Markov Prize for his work as a principal investigator of the Soviet-American Gallium Experiment, a major solarneutrino investigation.

Nancy Wilkins-Diehr Director of Consulting, Training & Documentation, SDSC

wilkinsn@sdsc.edu (858) 534-5118

The Consulting and Training Group provides front-line support for SDSC's production computing resources. Nancy received her Bachelor's degree from Boston College in Mathematics and Philosophy and her Master's degree in Aerospace Engineering from San Diego State University. She has been with SDSC since 1993.

Diane Baxter, Director of Education, SDSC at UCSD.

dbaxter@sdsc.edu (858) 822-5482

Before joining SDSC in February of 2005, she developed environmental science education programs at the North Carolina Aquarium, Birch Aquarium at Scripps, the Pfleger Institute of Environmental Research, and Quail Botanical Gardens.

Please call to Register (Limited Seating Available) ▸▸▸ CALL (505)-426-2222
www.nmhu.edu/nmci
www.cidays.org

Please call to Register (Limited Seating Available) ▶▶▶

CALL (505) 426-2222
www.nmhu.edu/nmci
www.cidays.org

SPONSORS / Participants

University of New Mexico
New Mexico Highlands University
New Mexico State University
Shodor Education Foundation
Internet2
National LambdaRail
HACU
EDUCAUSE
TeraGrid
San Diego Supercomputer Center
Open Science Grid
Minority Serving Cyberinfrastructure Empowerment Coalition

Cyberinfrastructure includes computing cycles and broadband networking, massive storage and managed information, observation and measurement tools, as well as leadership on shared standards, middleware and common applications for scientific computation. It also focuses on sharing, efficiency, making greater capabilities available across the science and engineering research communities. It facilitates new applications and collaboration and interoperability across institutions and disciplines.