

MSU in top 10 university supercomputer sites

Mississippi State continues up the ranks of national supercomputing sites, currently at No. 10 among American universities.

Data on the world's leading supercomputer sites, termed the "TOP500," is compiled and released twice a year by the universities of Mannheim (Germany) and Tennessee.

Released at the end of June, the latest list also shows MSU's Engineering Research Center as the 68th most powerful in the

Marcum to lead SimCenter, ERC

A veteran researcher has been named interim director of Mississippi State's Computational Simulation and Design Center, also known as the SimCenter, which is one component of the nationally recognized Engineering Research Center at MSU.

Mechanical engineer David Marcum, who serves as director of the overall ERC, also will lead the SimCenter, effective July 9. He succeeds aerospace engineer David Whitfield, who is leaving MSU for the University of Tennessee-Chattanooga.

MSU's SimCenter conducts research related to computational simulation that benefits federal government agencies and industry in areas that include design and certification of marine, aerospace, and propulsion systems.

The SimCenter, as one of the research components that make up the ERC, accounts for about 14 percent of overall ERC research expenditures and personnel. All the units are involved with computational related research in areas including ships, aircraft, spacecraft, automobiles, remote sensing, scientific visualization, computational systems, oceanographic, atmospheric, manufacturing, materials, and

U.S. and tied for 126th in the most-powerful-computer-sites-in-the-world category.

Mississippi State also contributes to the state of Mississippi's overall supercomputing power, which now is fifth in the nation and first among all Southeastern states.

"MSU debuted at 359 on the TOP500 list in 1996," said ERC computer specialist Roger Smith. "Thanks to a new system that actually is a cluster of computers, it has moved to its current position."

Smith said the cluster is made up of 1,038 processors using special software and a high-speed network to make them function like a single supercomputer.

The ERC at Mississippi State was a pioneer in the use of clustering proces-

sors to create supercomputers more than a decade ago. An important part of the clustering process is the Message Passing Interface, or MPI, software partially developed at MSU.

"The cluster enables you to create a lot of computing power using off-the-shelf personal computers and other readily available hardware for much less cost than a traditional supercomputer," Smith said. "The current MSU cluster is in its sixth generation and has 9.7 terabytes of disk space."

A terabyte is 1,000 gigabytes or one trillion characters, which is equal to almost 124 million typed pages of information. With 9.7 terabytes of disk space, the ERC supercomputer can store the equivalent of almost 1.8 billion pages.



Moses Hall (l) and Willie Coleman, both employees with a local contractor, worked recently to shape curbing for improvements to Blackjack Road. The heavily traveled road is being expanded to three lanes from Locksley Way to Hardy Street.

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Kim tapped for research enhancement award

A new member of the physics and astronomy faculty is receiving an Oak Ridge Associated Universities honor that memorializes a late MSU administrator.

Seong-Gon Kim is among 24 young scientists being honored with a \$10,000 Ralph E. Powe Junior Faculty Enhancement Award. He began work at the university earlier this year.

The assistant professor's teaching and research concentration is computational physics. The award will support his investigation of computational tools that can be developed to analyze molecules for possible use in molecular-sized electronic devices.

ORAU is a national consortium of 86 doctoral-granting universities and colleges working to develop collaborative research among its members, federal facilities and private industry. Its offices are located in Oak Ridge, Tenn., the town founded in 1942 as part of the Manhattan Project to develop an atomic bomb.

Given annually, the awards provide research seed money to gifted and promising faculty members at the organization's member institutions. They are designed as a living memorial for MSU's longtime research vice president who headed ORAU's Council of Sponsoring Institutions. Powe died in 1996 following a lengthy illness.

Interim MSU research vice president Jonathan Pote said the selection for a 2002 Powe award recognizes "the promise of

Dr. Kim's research career and also is a reflection of the quality of MSU's young faculty members."

Kim holds doctoral and master's degrees from Michigan State University and a bachelor's from Seoul National Uni-

versity in South Korea.

Prior to coming to Mississippi, he was technology director at WiseNut Inc., a Santa Clara, Calif.-based Internet search technology company.

Wolfe to lead admissions

After serving since 1998 as associate director, Diane D. Wolfe is the new director of admissions.

She succeeds Jerry B. Inmon, who retired in July following a career spanning more than 30 years.

"Diane Wolfe is uniquely qualified to provide leadership for the critical admissions role at Mississippi State," said Jimmy W. Abraham, assistant vice president for student affairs. "In an age of increased information requirements and more detailed evaluation procedures, she brings to the position a wealth of knowledge about the institution and the admissions processes."

Wolfe, who earned a bachelor's degree at MSU and a master's at the University of Mississippi, has held a variety of

positions in the admissions office, beginning with her initial 1989 assignment as an international admissions clerk. The Charleston native also has served as coordinator, supervisor and assistant director of admissions.

Among her professional affiliations are membership in the Association of International Educators and the Southern Association of Collegiate Registrars and Admissions Officers.

At MSU, she serves as a volunteer mentor in a new Student Affairs program pairing faculty and staff members with incoming freshmen. She also serves on the campus planning and implementation steering committee for the federally mandated Student and Exchange Visitor Information System.

New databases available at MSU Libraries

The MSU Libraries is providing access to several new databases from EBSCO Information Services, with more to be added later.

Now available are Medline, Agricola, SportDiscus and Inspec. On Sept. 1,

the Modern Language Association bibliography also may be accessed through EBSCO. Previously, the library subscribed to these databases from SilverPlatter, another information provider.

The MSU Libraries will benefit from substantial savings in subscription costs by changing to EBSCO as the electronic information provider, according to Stephen Cunetto, MSU Libraries system administrator.

The change is in agreement with other members of the Mississippi University Library consortium which includes the universities of Mississippi and Southern Mississippi, Delta State University, Mississippi University for Women, Alcorn State and Mississippi Valley State universities, and Millsaps, Mississippi and William Carey colleges.

MSU faculty, staff and students will receive increased electronic access to full text articles through the "smartlinking" feature in EBSCOHost.

For more information, telephone 325-7667, 325-7671 or 325-0810.



Jonny Spivey (r), president of the Mississippi Agricultural Industry Council, presents the last installment of a \$15,000 gift to endow the MAIC Scholarship fund to Jud Skelton, director of development for the College of Agriculture and Life Sciences. Each year, MAIC provides scholarships through the MSU Foundation to undergraduate students pursuing a degree in plant or animal management, production or protection.

Online resource highlighting state's black authors

What do novelist Margaret Walker Alexander, civil rights leader Medgar Evers and actress Beah Richards have in common? For one, all three are included in a unique Internet-available collection of Mississippi authors maintained at Mississippi State.

Mitchell Memorial Library is home to an evolving online file of African-American authors compiled to assist students and scholars in researching black writers with Mississippi ties, said Gail Peyton, interim reference services coordinator.

The file can be accessed by choosing the "Of Special Interest" option at nt.library.msstate.edu/.

Peyton said the list currently contains 91 novelists, playwrights, poets, and journalists who either had an influence on the state of Mississippi or who themselves were influenced by the Magnolia State. Each selection includes a biography and list of the author's publications.

"It's an exciting project," she said. "The site is both a motivational tool for African-American students who want to know more about their history and themselves, and a valuable resource for all Mississippians."

With the assistance of a \$2,000 grant from the university's Office of Research, the list was compiled by Peyton, her colleague and special collections reference librarian Lynn Mueller and student Brad McGee.

The resource remains "a work in progress," Peyton said. At present, she has a list of about 30 authors—including journalist Ida B. Wells and television personality Oprah Winfrey—yet to be added to the collection.

"The Web is a fantastic resource," she said, explaining that the names of emerging authors often can be found on Web sites or through electronic mail.

For more information about "Mississippi's African-American Authors," contact Peyton at 325-7671 or gpeyton@library.msstate.edu.

McGilberry is extension head

Longtime state program leader and administrative support coordinator Joe McGilberry is director of the Mississippi State Extension Service after serving one year as its interim director.

According to Dr. Vance Watson, "Dr. McGilberry's unparalleled familiarity with the new organizational structure and the philosophy behind it, coupled with his career-long focus on issues related to economic and community development, make him an obvious and excellent choice to head this major component of Mississippi State on a long-term basis."

Watson is interim vice president of MSU's Division of Agriculture, Forestry and Veterinary Medicine.

McGilberry was appointed interim extension director last July, having served since 1978 in various extension economic development efforts. For the 10 years prior to his appointment as interim director, he headed the Enterprise and Community Resource Development state program area within the Extension Service.

"Dr. McGilberry assumed leadership of the Extension Service during a time of transition, and we have depended on his experience in managing the business of the organization to maintain effective service to the citizens of Mississippi," said Interim President Charles Lee. "His experience and reputation in stimulating economic development will help to ensure that the agency does its part to assist individuals, businesses and communities in their economic pursuits."

The structure of the Extension Service is undergoing a change to allow it to more effectively deliver quality educational programs and assistance throughout the state. The plan provides a core staff in every county consisting of a county director, a



4-H agent or 4-H program assistant, and support staff. These staff will link every county to MSU's educational resources.

"The Extension Service is committed to delivering high quality programs by the use of modern technology, but we are also very much dedicated to sustaining the county extension of where people have gone for years for help, advice and educational programs," McGilberry said. "We will continue to be easy to find and ready to serve, but in ways that adapt to today's lifestyle and needs."

A native of Montgomery, Ala., McGilberry earned a bachelor's degree in industrial management from Auburn, a master's degree from the University of Tennessee and a doctorate from Texas A&M University in industrial engineering.

McGilberry's appointment was effective July 1, pending approval by the Board of Trustees, Institutions of Higher Learning.

Johnston, Rice both named to interim campus posts

Robert A. Johnston and Robert E. Rice Jr. are serving as interim directors of their respective departments after replacing longtime heads in early July.

Johnston is interim director of the Physical Plant. He replaces Don M. Mott who recently retired. Johnston was formerly assistant director in charge of facilities planning and construction.

Rice is interim director of Campus Landscape, replacing the retiring Charlie Scoggins. Rice served as construction superintendent/horticulture.

Both position changes became effective July 1.

Memo is published for the faculty and staff of Mississippi State University by the Office of University Relations. It is published weekly during the fall and spring semesters and twice a month during the summer. It is also available electronically through the World Wide Web at msuinfo.ur.msstate.edu/msu_memo/. Editorial material should be sent to Kay Fike Jones, Mail Stop 9512, or via Internet to jonesk@ur.msstate.edu.



Calendar of Events

Send your calendar items to

Kay Fike Jones, 102 George Hall; Mail Stop 9512; FAX 325-7455; e-mail jonesk@ur.msstate.edu at least **TWO WEEKS** in advance. For updates, check www.msstate.edu and click on "News" for msu.NOW!

July

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HRM workshop: University Police chief Tom Johnson presents "Workplace Violence," 10 a.m.-noon, Mitchell Memorial Library auditorium. Open to all employees. Register by calling 325-3713, or online at www.hrm.msstate.edu/trainingschedule.html.

IMC workshop: "PhotoShop," ELI Room, Mitchell Memorial Library, 10-11:15 a.m., library.msstate.edu/workshops/bitsnbytes.asp.

ITS workshop: "Banner: Invoice Processing," 8:30 a.m.-3 p.m.; "Intro to Microsoft PowerPoint 2000," 1:30-5 p.m., www.its.msstate.edu/Services/Instructional/Workshops/reg.php; 325-0631.

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ITS workshop: "Banner: Invoice Processing" 8:30 a.m.-noon; "Intro to Microsoft FrontPage," 8:30 a.m.-noon, www.its.msstate.edu/Services/Instructional/Workshops/reg.php; 325-0631.

Workshop: "Christmas in July," will train parents and other caregivers in methods of modifying toys to accommodate children with disabilities, T.K. Martin Center for Technology and Disability, 9:30 a.m. 325-1028.

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IMC workshop: "FrontPage," ELI Room, Mitchell Memorial Library, 1:30-4:15 p.m., library.msstate.edu/workshops/bitsnbytes.asp.

ITS workshop: "Intro to WebCT," 1:30-5 p.m., www.its.msstate.edu/Services/Instructional/Workshops/reg.php; 325-0631.

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Presentation: "Fly-tying Demonstration," Crosby Arboretum, Picayune, members free, non-members \$4, 9 a.m. 601-799-2311.

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IMC workshop: "Illustrator," ELI Room, Mitchell Memorial Library, 1:30-4:15 p.m., library.msstate.edu/workshops/bitsnbytes.asp.

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ITS workshop: "Banner: Electronic Approvals," 10 a.m.-noon, www.its.msstate.edu/Services/Instructional/Workshops/reg.php; 325-0631.

August

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Final examinations.

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Presentation: "Mushroom Foray," Crosby Arboretum, Picayune, noon. Reservations by Aug. 2. 601-799-2311.

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Workshop: "Floral Design," Student Media Center, \$300, 8 a.m. 325-1965.

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HRM workshop: University Police chief Tom Johnson presents "Workplace Violence," 2-4 p.m., Mitchell Memorial Library auditorium. Open to all employees. Register by calling 325-3713, or online at www.hrm.msstate.edu/trainingschedule.html.

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Residence halls open, 2 p.m. 325-3555.

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bio-medicine.

Thanks in large part to supercomputing capabilities of the ERC, MSU recently has moved to No. 10 in the ranks of national supercomputing sites at American universities.

Media reports originating in Chattanooga recently suggested that the SimCenter would leave MSU and be relocated to UT-Chattanooga. MSU officials have stressed that such a move will not and cannot happen.

"The SimCenter is an MSU organization and will remain here," said Interim President J. Charles Lee. "We have investments of millions of dollars worth of high-performance computing equipment and facilities in the SimCenter and a talented staff carrying out research that is contracted to the university and that can't be moved to another institution.

"We appreciate the leadership and service that Dr. Whitfield has provided to the SimCenter and wish him well as he undertakes the challenge of helping to start a new program in his field at UT-Chattanooga," Lee said.

Marcum has been an MSU faculty member since 1991, with teaching and research specialization in the fields of computational fluid dynamics, fluid mechanics, grid generation, and numerical methods. He worked prior to joining the university for Boeing aircraft company and TRW Ross Gear Division. He earned bachelor's, master's and doctoral degrees in mechanical engineering from Purdue University.

The Engineering Research Center at

MSU was founded in 1990 by MSU and the National Science Foundation as the Engineering Research Center for Computational Field Simulation. The ERC has since "graduated" from NSF sponsorship and now is self-sufficient through external funding. Research expenditures have grown from roughly \$4 million per year in 1990 to over \$24 million a year.

Much of the current funding is in the form of Department of Defense contracts, along with contracts and grants from NASA, NSF, the U.S. Department of Transportation, and industry.

Last year the ERC was awarded a \$108 million, eight-year Programming and Environment Training grant that is the largest DoD grant ever awarded to a university. As part of the contract, the MSU ERC leads a team of 15 universities and vendors.



Employment Opportunities

Lists of currently posted MSU positions (executive, administrative, faculty, and staff) are available on the Human Resources Management Web site www.hrm.msstate.edu/employment/postings.html, or by visiting HRM Employment Services at 150 McArthur Hall. Information on open support staff positions may also be obtained by calling Dial-A-Job at 325-4132.