



Missouri State[™]
U N I V E R S I T Y

College of Natural and Applied Sciences

August 2009

State of the College Address

Tammy Jahnke, Dean

CNAS Vision

- **The College of Natural and Applied Sciences at Missouri State University seeks to be recognized regionally and nationally for our outstanding students/graduates, teaching, scholarly productivity, and professional and community service.**

CNAS Mission

- **The College of Natural and Applied Sciences develops educated persons who, upon graduation, are prepared to make sound decisions relative to the natural and applied sciences and society and to be productive and successful in their careers. We are committed to excellence in teaching, research and scholarly activities, and community and professional service. Ethical leadership, cultural competence and community engagement are the cornerstones of our commitment to public affairs.**

Shared Values/Guiding Principles

- **We value**

- our students and their success;
- hands-on learning (applied and practical);
- academic rigor and critical thinking;
- faculty, staff and administrators;
- excellence in teaching, research and service;
- ethical behavior;
- our research endeavors;
- our community, alumni and friends; and
- continuous improvement.

CNAS Facts

- **CNAS**
- **9 departments and 1 program**
- **Nearly 250 faculty and staff**
 - 131 tenured or tenure/track faculty
 - 31 instructors (non-tenure eligible)
 - 71 graduate students on assistantship (31 externally funded)
 - 27 support staff (administrative/executive assistants, electronic support, etc)
- **Annual Budget – just over \$18 million
(nearly \$17 million for salaries and benefits, \$1.2 million for operations and equipment)**

CNAS New Faculty/Staff

- **AGR – Visiting Asst. Prof – Jason Salchow**
- **AGR – Director of Student Activities – Jim Bellis**
- **BIO – Asst. Professor – Day Ligon**
- **BIO – Professor – Laszlo Kovacs**
- **CHM – Professor – Alan Schick**
- **FID – Asst. Prof – Cathy Starr**
- **FID – Visiting Instructor – Tim McKelvie**
- **MTH – Instructor – Jennifer Lynn Beardon**
- **MTH – Instructor – Dianne Twigger**
- **MTH – Instructor – Patti Blanton**
- **MTH – Instructor - Linda Sun**
- **PAMS – Visiting Asst. Professor – Melissa Morris**
- **CNAS – Experimental Machinist – Brian Grindstaff**
- **CNAS –Executive Assistant – Gale Lininger**

CNAS New Leadership

- **Pawan Kahol – Associate Dean**
- **Paula Kemp – Acting Head – Department of Fashion and Interior Design**
- **Alan Schick – Head – Department of Chemistry**
- **Bob Patterson – Acting Head – Department of Physics, Astronomy and Materials Science**

- **CNAS Faculty Fellow for Research**
 - Provide grant writing help to faculty in CNAS.
 - Interested? Submit letter of interest along with a letter of support from department head by September 1. (one year appt with small stipend or course release)

Student Facts

- **2265 undergraduate student majors in fall 2008 and 2103 in spring 2009 (2198 to 2107 – fall 2007 to spring 2008)**
- **154 graduate students in fall 2008 and 138 in spring 2009 (162 to 154 - fall 2007 to spring 2008)**
- **Fall 2009 data is not yet available but I will update in my Blog just as soon as it is available.**

Department	Spring 2007 Majors Undergraduate/Graduate	Spring 2008 Majors Undergraduate/Graduate	Spring 2009 Majors Undergraduate/Graduate
Agriculture	354/21	359/21	341/20
Biology	420/45	458/50	518/42
Chemistry	126/14	130/18	131/13
Computer Science	134/4	147/1	115/2
Engineering	0/0	0/0	49
Fashion and Interior Design	415	396	359
Geography, Geology & Planning	124/23	147/27	154/28
Hospitality and Restaurant Administration	273	271	249
Mathematics	144/23	133/20	136/20
Physics, Astronomy & Materials Science	60/12	66/16	58/13

Credit Hour Productivity – Spring Semesters (college/departmental data)

Year_Term		2009 SP	2008 SP	2007 SP	2006 SP	2005 SP
		SCH	SCH	SCH	SCH	SCH
College	Department	Value	Value	Value	Value	Value
AL		40860	40333	40363	39864	39828
BU		42618	41572	40415	39115	38466
ED		14862	14210	14044	13531	14090
GR		0	0	0	3	0
HH		30282	30465	29616	27664	27437
HP		33730	33557	34369	34758	35431
LI		139	116	0	0	0
NA		40250	40857	41341	39759	39574
	AG	3231	3355	3448	3368	3571
	BI	5867	5787	5726	5349	5837
	CF	0	0	6460	6162	5672
	CH	6219	6008	5886	5683	5678
	CS	1950	1784	1725	1739	1487
	FI	2377	2909	0	0	0
	FS	0	0	40	89	26
	GG	5830	5942	5898	5575	5772
	MA	8097	8093	8374	7873	7644
	NA	243	209	213	186	75
	PA	3964	4091	3571	3735	3812
	RA	2472	2679	0	0	0
UC		462	3284	3343	3727	3813

External Funding

Through May 2009 CNAS faculty/staff submitted 146 proposals. CNAS faculty/staff were awarded 97 grants worth \$4,357,279.

Through May 2009 Missouri State faculty/staff submitted 396 proposals. Missouri State faculty/staff were awarded 244 grants worth \$17,003,469.

No other college submitted more than 100 proposals. CHHS submitted 63 and CHPA submitted 58.

CNAS Faculty/Staff with current external funding in FY09

- Marilyn Odneal
- Lyndon Irwin
- Wenping Qiu
- Maciej Pszczolkowski
- Laszlo Kovacs
- Paul Durham
- Tom Tomasi
- Beth Walker
- Gary Webb
- Lynn Robbins
- Alicia Mathis
- Dan Beckman
- Alexander Wait
- Janice Greene
- John Avery
- Gary Meints
- Kevin Mickus
- Jun Luo
- Les Reid
- Cameron Wickham
- Jorge Rebaza
- Yungchen Cheng
- Lynda Plymate
- Mike Reed
- Xin Miao
- Chris Barnhart
- Bob Pavlowsky
- Lifeng Dong
- Kartik Ghosh
- Pawan Kahol
- George Wolf
- Russ Rhodes
- Bill Cheek
- Jane Hood
- Dennis Schmitt
- Bob Patterson
- Dorothy Wittorff-Sandgren
- Diane May
- Dan Watts
- Kandiah Manivannan
- Larry Campbell
- Adam Wanekaya
- Nick Gerasimchuk
- Shawn Huang
- Erich Steinle
- Doug Gouzie
- Melida Gutierrez
- Erwin Mantei
- Chuck Rovey
- Tom Plymate
- Elizabeth Bowles
- Celeste Prussia
- Arbindra Rimal
- Eric Bosch

CNAS Grant Incentive Program

	Spring 2008	Fall 2008	Spring 2009
Agriculture	\$400	\$800	
Agriculture – Mt. Grove	\$1200	\$400	
Biology	\$1600	\$2000	\$400
Chemistry	\$2000	\$1600	\$400
Computer Science	\$400	\$400	
Geography, Geology and Planning	\$1600	\$1200	\$1200
Mathematics	\$800	-	\$1200
Physics, Astronomy and Materials Science	\$1200	\$2400	\$400
Center for Resource Planning and Management	\$400	-	

Budget Summary

- **Departments/College survived the first year of Banner but FY09 will not close until mid-September so I have no carry-forward information at this time.**
- **Faculty recruitment expenses - \$12,105**
- **Science Olympiad/Science Fair expenses - \$12,000**
- **CNAS Equipment/Repair Budget Balance - \$245,000 (\$60K is committed as match for confocal microscope and \$12.5K is committed to HRA for a compressor). We did have to replace a compressor/drier on the roof of Temple Hall this summer/fall. Total expenses will be approximately \$30,000.**

Salary Savings Committed

- **\$220,208 (start-up funds 2008-2010)**
- **\$60,000 (STEM GA's FY10)**
- **\$60,000 (STEM GA's FY11)**
- **\$12,000 (Summer fellowships for new tenure-track faculty)**
- **\$10,000 (misc one-time expenses)**
- **\$12,000 (microscopes for AG)**
- **? Start up funds for 2009-2010 hires.**

\$696,077 allocated to CNAS assistantships during the 2008-2009 academic year

Year	Teaching Assistants	Research Assistants
2001	61	6
2002	66	3
2003	62	5
2004	63	14
2005	54	11
2006	59	33
2007	52	23
2008	79	31
2009		

FY10 Budgets

- **Budgets for FY10 were held steady except for travel which was decreased by 10% overall by Dr. Nietzel.**
 - Departments are going to have to prioritize your travel budgets for this year more than ever.
 - The International Travel Fund at the university level was eliminated. I am willing to help at the college level but I cannot at the level that was eliminated.

Economic Realities for the Future

- **State budgets**

- FY10 – We are hoping for no holdbacks for this year but that will depend entirely on the state revenues.
- FY11 – Tuition increases are likely. We are very hopeful that our budget will remain steady from the state but there are issues.
- FY12 – We could be funded at FY06 levels if state revenues do not pick up and higher education has a higher priority.

Development Report

- **Gifts to Missouri State University Foundation – CNAS**

- FY06 \$610,473
- FY07 \$727,700
- FY08 \$1,172,839
- FY09 CNAS numbers are not available yet but the university broke another record for the year!!!!

Scholarship Awards

Department	Scholarship \$ awarded 2007-2008	Scholarship \$ awarded 2008-2009
Agriculture	\$56,850	\$51,550
Biology	\$6,000	\$2,400
Chemistry	\$21,450	\$25,744
CNAS	\$15,600	\$20,800
Computer Science	\$5,000	\$5,625
Fashion/Interior Design	\$2,800	\$4,810
Geography, Geology and Planning	\$2,625	\$3,875
Hospitality and Restaurant Administration	\$2,750	\$2,250
Mathematics	\$23,000	\$34,500
Physics, Astronomy and Materials Science	\$3,075	-
TOTAL	\$139,150	\$151,554

Foundation Award Winners

- **Foundation Award Winners will be announced at the All Faculty Reception on Monday, September 14 at 3:00 PM in PSU.**

- **Goal #1 – Expand Opportunities for student success while maintaining academic rigor.**

- Math tutoring moved to learning commons in the library.
- Supplemental instruction.
- HRA curricular revisions.

- **Goal #2 – Develop facilities that will support our pursuit of excellence.**

- Applied to NIST and NIH for additional facilities. Not funded.
- Animal lab renovations will move forward in a revised manner.
- Mountain Grove facility renovations are moving forward with help from many.
- FREUP for Temple, Kings Street, and Shepard Hall – approved but not released.

- **Goal #3 – Continue to develop a diverse and strong faculty.**

- Travel was supported.
- Grant incentive program was supported.
- Summer Fellowships for new faculty was supported by CNAS.

- **Goal #4 – Continue to build our national and international reputation through innovative scholarly research/creative activities and high quality students.**
 - Publications, presentations, grant proposals
 - Undergraduate and Graduate student presentations at professional meetings
- **Goal #5 – Increase the visibility of CNAS.**
 - Blog, Newswatch, Press releases, public lecture series, outreach activities
 - Springfield Business Journal Ads
- **Goal #6 – Enrich the university’s public affairs mission.**
 - Documentation regarding public affairs in each major was collected this past year.
- **Goal #7 – Continue to communicate and live our shared values and guiding principles.**
 - Blog
 - Faculty Advisory Committee
 - Student Advisory Committee

Program Review

- **Computer Science – ABET visit fall of 2006, external reviewer fall of 2007, action plan spring 2008, update presented to BOG spring 2009.**
- **Fashion and Interior Design – CTM visit spring of 2008, FID visit fall of 2008, action plan spring 2009, update will be presented in spring 2010**
- **Geography, Geology and Planning – Self-study accepted summer 2009, site visit to be scheduled for fall 2009.**
- **Physics, Astronomy and Materials Science – Self-study accepted summer 2009, site visit to be scheduled for fall 2009.**
- **Mathematics – Self-study needs a little more work.**
- **Agriculture – Pre-program review consultation visit is planned for fall 2009.**
- **Chemistry – Starting self-study. First draft is due March 1, 2010.**
- **Biology – Starting self-study. First draft is due March 1, 2010.**

NCATE/DESE

- **A meeting with Science Education faculty and Dean Kear will be scheduled for early September.**
- **It is my understanding that units with specialty accreditation like math and science can choose to do this or not. It is really up to us and will not impact the NCATE accreditation.**
- **Either SPA reports or DESE reports will still be due by each program in early 2010 (February).**

Outreach – 2008-2009

- **Pummill Relays (Spring) – MTH (900 students)**
- **Pummill Relays computer Programming (Spring) – CSC (10 students)**
- **Missouri Elementary Math Contest Final (Spring) – MTH (475 students)**
- **Missouri Middle School Math Contest Final (Spring) – MTH (225 students)**
- **FFA Contests (Spring) – AG (2500 students)**
- **Block and Bridle Show Clinic – AG (150 students)**
- **FFA Greenhand Motivational Conference - AG (2500 students)**
- **Food for America/Collegiate FFA - AG (50 students)**
- **FFA Speech Contest (Fall) - AG (60 students)**
- **FFA Leadership Conference – AG (300 students)**
- **Science Olympiad (Spring) – CNAS (600 students)**
- **Junior Academy of Science (Spring) – CNAS (15 students)**
- **Ozarks Science and Engineering Fair (Spring) – CNAS (200 students)**
- **Expanding Your Horizons (Fall) – CNAS (150 students)**
- **JETS TEAMS Competition – PHY (7 teams in 2009, 45 students)**
 - **Hosted for the first time in March 2009**
- **Sonia Kovalesky Day (MTH) – 50 students**
 - **Hosted for the first time in March 2009**
- **Tours of Chemistry and Physics and Biology Labs (various times)**

Summer Activities for High School Students – Summer 2009

- **Missouri Innovation Academy - 30 students**
 - [Missouri Innovation Academy](#)
 - Funded by Department of Education
- **GLADE - 16 students**
 - [Green Leadership Academy for Diverse Ecosystems](#)
 - Funded by Greater Ozark Audubon Society
- **STARS (Tried in Summer 2009, will try again in 2010)**

Outreach – 2009-2010

- Science Fair Project Help – Fall 2009
- October 24, 2009 – Expanding Your Horizons
- February 20, 2010 – Science Olympiad (on Missouri State campus)
- March 6, 2010 – JETS Competition
- March 29-30, 2010 – FFA Contest on Missouri State Campus
- April 6-8, 2010 – Ozarks Science and Engineering Fair
- April 11-13, 2010 – Geological Society of America – Regional Meeting (Branson)
- April 14, 2010 – Pummill Relays - Mathematics
- April 16-17, 2010 – Missouri Academy of Science – Missouri State University
- May 1, 2010 – NCTM – Statewide Mathematics Competition (middle and elementary)
- And much more!!!!

- **Goal #1 – Expand Opportunities for student success while maintaining academic rigor.**
 - Enrollment Management – Student Success, Access, Advising
- **Goal #2 – Develop facilities that will support our pursuit of excellence.**
 - Planning study to begin later this fall for SW corner of campus – the science quad!
 - HRA – Possibilities are developing to move HRA to the IDEA Commons.
- **Goal #3 – Continue to develop a diverse and strong faculty.**
 - Key but cautious hiring.
 - Seeking input on professional development opportunities for faculty/staff in CNAS.
- **Goal #4 – Continue to build our national and international reputation through innovative scholarly research/creative activities and high quality students.**
 - Space, space, space.
 - Time, time, time.

- **Goal #5 – Increase the visibility and stature of CNAS.**
 - Public Science Lecture Series, Science Fair help, continued outreach.
 - Student Research Symposium – March 26, 2010
 - Hosting Missouri Academy of Science – April 16-17, 2010
 - Graduate Student Interdisciplinary Forum – April 17, 2010
- **Goal #6 – Model the university’s public affairs mission.**
 - Enhance and broaden study away opportunities.
- **Goal #7 – Continue to work with the development staff on friend raising/fundraising.**
 - Equipment Challenge Grant Opportunity – I have agreed to match \$1 for each \$5 donated to this fund up to \$5000. So far I have only had write a check for \$40. My goal is to have a \$5 million endowment to help cover equipment needs in CNAS.

Enrollment Management Plan - CNAS

- **Enrollment Management - with decreasing state revenues it is imperative that we increase student credit hour production wherever we can.**
 - Departments and dean are reviewing course offerings to determine best access, # of sections, etc to meet the needs of students.
 - Low enrollment classes are monitored by heads and dean/associate dean.
 - Online development of courses is occurring in MTH (MTH135), HRA, and AG. Some graduate courses in the MNAS program will need to be online for teachers.
 - Budget allocations for per course, evening, online, intersession and summer are allocated based on student demand and enrollment projections.
 - Departments are participating in supplemental instruction and the Learning Commons. Data is being collected regarding student usage and success.
 - We are seeking ways to increase study away opportunities in CNAS.
 - Departments are seeking avenues to offer noncredit classes.
 - College will survey all CNAS majors in fall 2009 to determine their unmet needs for advisement and course offerings.
 - Four year graduation plans are posted (including summer classes).
 - Students on warning/probation are being contacted by CNAS staff.

Keys for 2009-2010

- **Enhance Educational Programs**
 - Enrollment Management, access, student success, student-centered commitments.
- **Develop and implement a strategic marketing plan**
- **Improve Campus Facilities**
- **Make progress on comprehensive campaign**
- **Identify and make selective investments in research**
- **Begin the process of developing a new long-range plan**
- **Promote “inclusive excellence” across the institution**
- **Focus on Financing the University**

University Sustainability Statement

Missouri State University is committed to environmental sustainability and stewardship. By working to create a cleaner environment through community service efforts, the application of earth-friendly technology and practices, research projects, and responsible development planning, we will strive to work for a better tomorrow. Through education and community outreach, we will provide students with the knowledge and skills to be environmentally responsible citizens and consider the global ramifications of their actions and the actions of others around them. To that end, Missouri State University is committed to continuous improvement in:

- ***Incorporation of environmentally responsible concerns in University decision making.***
- ***Demonstration of institutional practices that promote sustainability, including energy savings measures, increasing the use of renewable resources, and decreasing production of waste materials.***
- ***Providing educational programs and encouraging environmental inquiry for students and the community concerning positive environmental practices.***
- ***Establishment of sustainability indicators to enable monitoring, reporting and improvement measures.***
- ***Enhancing the health of campus ecosystems and increasing the diversity of native species whenever possible.***
- ***Promotion of health, productivity and safety practices on campus through education, maintenance and design of campus buildings.***

Our decisions and actions will be guided by the University's Public Affairs Mission, will be reflective of the University's resources, and informed by the University's Strategic Plan. As a learning institution, we recognize that planning for sustainability will be an evolving and iterative practice.

Sustainability

- **Environmental Focus Committee –**
 - Melida Gutierrez (through 2010)
 - Pam Sailors (through 2010)
 - Mark Rushefsky (through 2010)
 - Brian Greene (through 2010)
 - Carol Miller (through 2011)
 - Alexander Wait (through 2011)
 - Roberta Aram (through 2012)
 - Lora Vess (through 2012)
 - Pawan Kahol, ex officio
- **Charge –**
 - To identify ways through the curriculum and specific classes (credit and non-credit) to raise the consciousness of the campus and the surrounding community regarding significant environmental issues. To advise in matters of curriculum for the interdisciplinary environmental sciences and policy minor. In particular, this year I would like for the committee to investigate certificate or MS degree programs to address sustainability issues. A summary report of the committee's work is to be submitted to the CNAS Dean at the end of the academic year.

Sustainability

- **Sustainability Advisory Committee**
 - Tammy Jahnke, Co-Chair
 - Ken McClure, Co-Chair
 - Janice Greene
 - Anson Elliott
 - Bill Cheek
 - Jen Cox
 - Jeff Brown
 - Bob Eckels
 - Doug Sampson
 - Shelly Duran
 - Barbara Lucks
 - Mike Kromrey
 - Earle Doman
- **Charge**
 - Celebrate the successes related to sustainability initiatives and articulate our commitment to the future.
 - Identify ways to inform the campus community, Springfield community, Missouri and beyond what Missouri State is doing related to sustainability.
 - Use the university's current sustainability statement to frame our path.
- **Save the Date**
 - November 18 - We will be celebrating our sustainability successes and articulating our commitment to the future at a "Sustainability Fair".

Sustainability – Reasons to Celebrate and A Commitment to the Future

- ***Incorporation of environmentally responsible concerns in University decision making.***
 - *New campus rec center will meet LEED certification standards.*
 - *Energy manager on staff.*
 - ***MSU is investigating the possibility of LEED certification for current buildings.***
- ***Demonstration of institutional practices that promote sustainability***
 - *Sodexo is composting food waste.*
 - *University uses several electric vehicles.*
 - ***Recycling – Campus-wide (Goal – January 2010)***
- ***Providing educational programs and encouraging environmental inquiry***
 - *Carbon sequestration research project with CU*
 - *ONE Conference and Focus the Nation and Earth Day Events*
 - ***Future certificate and/or degree programs***

- **Establishment of sustainability indicators**
 - Data is available on electricity, natural gas and water usage.
 - Preliminary recycling data is available.
 - **Specific goals will be clearly articulated.**
- **Enhancing the health of campus ecosystems**
 - Tree management program established.
 - Water Garden on the Mountain Grove Campus
 - **Interest in “Green Yard” Certification**
- **Promotion of health, productivity and safety practices**
 - November 18 Sustainability Event
 - Sustainability Website - <http://www.missouristate.edu/sustainability/>
 - **Regular updates are communicated to MSU community.**

- **Sensor Technology, speaker: Dr. Erich Steinle, Department of Chemistry**
 - September 15, Tuesday, 7:30-8:30, Temple Hall 002
- **The Space Elevator, speaker: Dr. Emmett Redd, Department of Physics, Astronomy & Material Science**
 - October 13, Tuesday, 7:30-8:30, Temple Hall 002
- **Sex & Evolution, speaker: Dr. John Heywood, Department of Biology**
 - November 10, Tuesday, 7:30-8:30, Temple Hall 002

PARKING WILL BE AVAILABLE IN LOT 4, SOUTH OF TEMPLE HALL

Other Important Dates

- **August 28 – Legacy Day**
- **September 12 – 25th Anniversary of Watershed Committee of the Ozarks**
 - 8 AM – 2 PM, Valley Water Mill Park
- **September 14 – All Faculty Reception, 3 PM, PSU**
- **September 23 – Majors Fair**
- **September 29 – President Nietzel’s State of the University Address at NOON, PSU**
- **October 15-16 – FALL BREAK – No Classes**
- **October 29 – CNAS Emeritus Faculty Dinner**
- **October 31 – Homecoming**
- **November 18 – Sustainability Fair - PSU**