

College of Natural and Applied Sciences

August 23, 2011

State of the College Address

Tammy Jahnke, Dean

follow your
PASSION
find your
PLACE

CNAS New Leadership

- Ken Vollmar – Head – Department of Computer Science and Interim Head - Department of Mathematics
- Xingping Sun – Interim Associate Dean
- **THANK YOU, THANK YOU, THANK YOU!!!**
 - Yungchen Cheng – For many years of faithful and diligent service as head of the department of mathematics.
 - Pawan Kahol – Interim Graduate Dean

CNAS New Faculty/Staff

- CHM – Visiting Assistant Professor – Dr. Dmitry Kadnikov
- MTH – Instructor – Sam Brown
- MTH – Instructor – Kimberly White
- MTH – Instructor – Kathleen Schmidt
- HRA – Executive in Residence – Darren Harralson

- EGR – S&T Assistant Professor – Dr. Abner Chen
- EGR – S&T Assistant Professor – Dr. Theresa Odun-Ayo



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.

OR

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

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.

OR

- 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 – our commitment to public affairs. We are committed to excellence in teaching, research and scholarly activities, and community and professional service.

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.



- **Access to Success**
 - Recruit and welcome a more diverse student population
 - Continue with course transformation projects
 - Increase number of STEM graduates
 - Clearly articulated student learning outcomes for each program
 - Comprehensive assessment plans
- **Public Affairs**
 - Support sustainability initiatives
 - Continue to support study away opportunities
 - Responsible conduct in research
 - Continue community engagement
- **Engaged Inquiry**
 - Submit over 100 grant proposals within the year
 - Support student research and the faculty who mentor the students (workload policy)
 - Support Research Day activities (undergraduate and graduate)
 - Set productivity measures for centers and institutes in CNAS

- **Partners for Progress**
 - Continue to work with JVIC and National Park Service
 - Find donor to build HRA facility in IDEA Commons
 - Investigate the possibility of moving engineering to IDEA Commons
 - Continue collaborations with K-12 schools including all competitions
 - Connect with those who can support student internships
- **Valuing and Supporting People**
 - Recruit and retain a diverse workforce
 - Provide appropriate professional development opportunities for faculty and staff
- **Responsible Stewardship**
 - Support sustainability initiatives
 - Deans and heads will allocate resources appropriately
 - CNAS Budget Committee will meet regularly and be involved with decisions
 - Space Analysis and reallocation of space

Overarching and enduring commitments

- Student Learning
- Inclusive Excellence
- Institutional Impact

CNAS Facts

- [CNAS](#)
- 7 departments and 1 program
- Nearly 200 full-time faculty and staff
 - 105 tenured or tenure/track faculty
 - An additional 7 on half-time appts
 - 26 instructors (non-tenure eligible)
 - Over 80 graduate students on assistantship
 - 30 support staff (administrative/executive assistants, electronic support, etc)
- Annual Budget – nearly \$14.5 million

Faculty Promotions - 2010

- Professor
 - Gay Ragan - Mathematics
 - Saibal Mitra – Physics, Astronomy and Materials Science
- Associate Professor with tenure
 - Lifeng Dong – Physics, Astronomy and Materials Science
 - Jun Luo – Geography, Geology and Planning
 - Xin Miao – Geography, Geology and Planning
 - Kyoungtae Kim - Biology

Postdoctoral Associates

- PAMS – Postdoctoral Associate - Hao Yan
 - Sponsored and funded by Bob Mayanovic
- PAMS – Postdoctoral Associate – Andy Baran
 - Sponsored and funded by Mike Reed

Fall 2011 1,920 Undergraduate and 167 Graduate Students

Department	Spring 2007 Majors Undergraduate/ Graduate	Spring 2008 Majors Undergraduate/ Graduate	Spring 2009 Majors Undergraduate/ Graduate	Spring 2010 Majors Undergraduate/ Graduate	Spring 2011 Majors Undergraduate/ Graduate
Biology	420/45	458/50	518/42	520/36	545/52
Chemistry	126/14	130/18	131/13	151/20	173/16
Computer Science	134/4	147/1	115/2	117/3	131/8
Engineering	0/0	0/0	49	95	140
Geography, Geology & Planning	124/23	147/27	154/28	207/31	231/45
Hospitality and Restaurant Administration	273	271	249	254	246
Mathematics	144/23	133/20	136/20	140/21	148/30
Physics, Astronomy & Materials Science	60/12	66/16	58/13	58/8	81/13

of students in majors vs. # of graduates

Department	Spring 2010 Majors Undergraduate/ Graduate	Spring 2011 Majors Undergraduate/ Graduate	Range of BA/BS Graduates/year from 2006-2010	Range of MS Graduates/year from 2006-2010
Biology	520/36	545/52	83-113	13-27
Chemistry	151/20	173/16	14-21	2-7
Computer Science	117/3	131/8	14-28	0-2
Engineering	95	140	0	
Geography, Geology & Planning	207/31	231/45	34-41	5-7
Hospitality and Restaurant Administration	254	246	65-100	
Mathematics	140/21	148/30	22-31	2-11
Physics, Astronomy & Materials Science	58/8	81/13	5-11	3-11



External Funding – FY11

- ❑ 67 Awards were made to CNAS Faculty and Staff valued at nearly \$3.5 million. (110 awards in FY10)
 - ❑ Biology – 19 awards for \$903,326 (29 awards in FY10)
 - ❑ Bull Shoals Field Station – 8 awards for \$176,295 (8 awards in FY10)
 - ❑ Chemistry – 3 awards for \$115,000 (2 awards in FY10)
 - ❑ GGP – 1 award for \$4,500 (6 awards in FY10)
 - ❑ CRPM – 15 awards for \$1,363,849 (25 awards in FY10)
 - ❑ OEWRI – 5 awards for \$290,769 (6 awards in FY10)
 - ❑ Computer Science – No awards in FY11 (1 award in FY10)
 - ❑ Mathematics – 6 awards for \$222,750 (5 awards in FY10)
 - ❑ PAMS – 7 awards for \$387,855 (12 awards in FY10)
 - ❑ EGR – 1 award for \$23,915

- ❑ CASE – 2 awards for \$800,000 (1 award in FY10)
- ❑ CBLS – 7 awards for \$3,125,171 (8 awards in FY10)



CNAS Grant Incentive Program

	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011
Biology	\$1600	\$2000	\$400	\$2800	\$800	\$2000	\$400
Chemistry	\$2000	\$1600	\$400	\$2000	-	\$800	\$400
Computer Science	\$400	\$400	-	-	-	\$400	
Geography, Geology and Planning	\$1600	\$1200	\$1200	\$800	\$400	\$2000	\$400
Mathematics	\$800	-	\$1200	\$1200	-	\$800	
Physics, Astronomy and Materials Science	\$1200	\$2400	\$400	\$2800	\$400	\$1600	\$400



Faculty Publications – 2010

as reported in Digital Measures

Dept	# tenure-track/tenured faculty	2010 Book or book chapters published	2010 published abstracts	2010 published conference proceedings	2010 peer-reviewed journal publications	# of additional professional staff
Biology	16	2		1	20	8
Chemistry	16			1	20	3
CSC	7		1		1	2
EGR	2					2 from S&T
GGP	19	3	9	1	9	3
HRA	6	2			1	0
Mathematics	21	1		2	13	12
PAMS	13		1	4	27	3



Third Annual CNAS Undergraduate Research Day – April 13, 2012

- The purpose of this event is to give undergraduates the chance to share their research and show their hard work to other students and the community. This is also a great opportunity for them to gain experience in presenting their work. Judges consist of emeritus faculty, invited faculty from other universities and community leaders.
- Year 1 – 45 poster presentations, over 300 attended
- Year 2 – 37 poster presentations, over 500 attended

2012 CNAS Research Events

- April 13 – CNAS Undergraduate Research Day
- April 13 – HRA Regional Undergraduate Research Symposium (MSU hosts at Kentwood Hall)
- April 14 – Graduate College Interdisciplinary Forum

Program Review

- Computer Science – Will request ABET reaccreditation in January of 2012, self-study due in June of 2012 with site visit in 2012-2013.
- Geography, Geology and Planning – Planning self-study due in summer of 2012 with site visit in 2012-2013.
- Physics, Astronomy and Materials Science – Dean reports action plan to BOG in October of 2011.
- Mathematics – Dean reports action plan to BOG in October of 2011.
- Chemistry – Action Plan Received in 2011, dean must report progress to BOG in Summer of 2012.
- Biology – Action Plan Received in 2011, dean must report progress to BOG in Summer of 2012
- HRA – Accreditation site visit October 23-26, 2011.
- Engineering – Accreditation site visit October 23-25, 2011.



Facilities Update

- Vivarium – Temple Hall
 - Complete plans, start construction before the end of 2011
- Teaching Laboratories
 - Four chemistry labs renovated in summer of 2011
- Engineering
 - Investigating a move downtown into the Plaster facility by summer of 2012.
- Infrastructure work – Cheek Hall – complete
- Roofs
 - Kemper – Should be done soon.
 - Cheek and Temple are on the list to do next.
- Space Reallocations will happen this year within CNAS.

Outreach – 2011-2012

- September 12 – Science Journal Club starts (PAMS)
- September 24 – Expanding Your Horizons
- October 19 – 3rd Annual Sustainability Fair – MSU
- October 26 – Nanofrontiers Conference – MSU hosts
- November 5 – ACM Programming Contest
- November 12 - MAKO Undergraduate Math Research conference
- February 11 – Regional Science Olympiad (on Missouri State campus)
- March 9 – Regional Missouri Junior Academy of Science
- April 3-5 - Ozarks Science and Engineering Fair
- April 11 - Pummill Relays - Mathematics
- April 20-21 – Missouri Academy of Science (MU hosts)
- April 21 – Super Science Saturday – Spring Showcase
- May 5 - NCTM – Statewide Mathematics Competition (middle and elementary)
- And much more!!!!

- “The Fourth Dimension And Beyond” Speaker: **Dr. Les Reid**,
Department of Mathematics
 - September 13, Tuesday, 7:30-8:30 PM, Temple Hall 002
- “Metal Complexes in Treatment of Human Diseases” Speaker: **Dr. Nikolay Gerasimchuk**, Department of Chemistry
 - October 11, Tuesday, 7:30-8:30 PM, Temple Hall 002
- “Nature and the Human Condition” Speaker: **Dr. Janice Greene**,
Department of Biology
 - November 8, Tuesday, 7:30-8:30 PM, Temple Hall 002

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

Development Report

- Missouri State Faculty/Staff Campaign begins in September.
- CNAS Dean's Equipment Fund Challenge – Dean matches \$1 for every \$5 donated up to \$5K
 - We now have over \$15,000 so far!!!!
 - *Make that over \$17,000 so far with a donation and pledge from our new interim associate dean – Thank you, Xingping!!!*
 - By December 2012 - \$30K – use \$20K for equipment, put \$10K in an endowment.
 - Long term goal - \$5M in an endowed account for equipment

Gifts to MSU Foundation by Department

Department	FY09	FY10	FY11
Biology	13,870.25	30,707.04	26,711.50
Chemistry	42,551.00	112,885.30	18,815.27
Computer Science	4,605.00	3,980.00	28,150.00
Geography, Geology, & Planning	15,440.00	27,267.80	19,598.13
Hospitality & Restaurant Admin	31,908.03	15,019.25	30,243.00
Mathematics	13,746.08	15,087.50	63,595.00
Natural & App Sci/Sci & Engrng	2,140.00	3,539.00	4,447.50
Physics, Astronomy, & Mat Sci	4,067.50	19,057.50	7,967.50
TOTALS	128,327.86	227,543.39	199,527.90



Friendraising/Fundraising Advisory Boards in CNAS

- The following units have advisory boards that are now meeting regularly –
 - Biology
 - Chemistry
 - Bull Shoals Field Station
 - Computer Science
 - Hospitality and Restaurant Administration
 - Physics, Astronomy and Materials Science
 - Geography, Geology and Planning
 - Engineering
 - Professional Science Masters Advisory Board
 - Mathematics is forming an advisory board this year!!!
- Thank you, thank you, thank you!

Scholarship Awards

Unit	Awards 2007-2008	Awards 2008-2009	Awards 2009-2010	Awards 2010-2011
Biology	\$6,000	\$2,400	\$21,150	\$7,500
Chemistry	\$21,450	\$25,744	\$24,062	\$20,050
CNAS	\$15,600	\$20,800	\$12,748	\$18,550
Computer Science	\$5,000	\$5,625	\$2,350	\$4,250
Engineering			\$2,000	-0-
Geography, Geology and Planning	\$2,625	\$3,875	\$4,858	\$5,750
Hospitality and Restaurant Administration	\$2,750	\$2,250	\$8,830	\$6,875
Mathematics	\$23,000	\$34,500	\$17,740	\$14,570
Physics, Astronomy and Materials Science	\$3,075	-	\$4,120	\$4,200
Total	\$79,500	\$95,194	\$97,858	\$81,745

College Budget Committee

- Elected Committee Members
 - John Havel – Biology
 - Shujun Su – Chemistry
 - Jamil Saquer – CSC
 - Stephanie Hein – HRA
 - Bob Egbert – EGR
 - TBA – MTH
 - Lifeng Dong – PAMS
 - TBA - GGP
- Appointed Committee Members will be announced within the week.
- Terms for all members will be announced soon thereafter.
- First meeting – Elect representatives to AA and Executive Committees and summary report.

Have a wonderful semester!

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