Dr. Harvest Collier, Vice Provost for undergraduate studies at Missouri University of Science and Technology, is one of 10 educators in the United States to be selected as Outstanding First-Year Student Advocate by a national organization based at the University of South Carolina.

Collier received the award in February from the National Resource Center for the First-Year Experience and Students in Transition. The award was presented during the center’s 29th Annual Conference on the First-Year Experience Feb. 12-16 in Denver.

Collier and the other recipients were recognized for their efforts to improve the experiences of first-year college students.

“I want all students to be successful.”

As Vice Provost of undergraduate studies and a chemistry professor at Missouri S&T, Collier has initiated and led several programs designed to improve student learning, particularly in the areas of science, technology, engineering and mathematics. An advocate of collaborative learning and the use of technology in the classroom, Collier has also been instrumental in developing programs such as “Hit the Ground Running” to help incoming freshmen make the transition from high school to college.

Collier also serves as director of Missouri S&T’s Center for Educational Research and Teaching Innovation, a position he has held since 2003. The center promotes faculty development in areas of collaborative and experiential learning, technology-enhanced learning, and educational research.

Collier joined the Missouri S&T faculty in 1982 as an assistant professor of chemistry. He was promoted to associate professor in 1988 and professor in 1994. From 1996-1999, he served as chair of the chemistry department, and from 1999-2002, he was associate dean for the College of Arts and Sciences. He was named vice provost for undergraduate and graduate studies in 2001 and in 2007 became vice provost for undergraduate studies.

Collier holds bachelor’s, master’s and Ph.D. degrees in inorganic chemistry from Mississippi State University.
$1.25 Million Donation Moves Design Center Forward

Work is expected to begin this spring on a new facility to house Missouri University of Science and Technology’s 10 student design teams. At 23,000 square feet, the new Missouri S&T student design center will give students more room to build concrete canoes, radio-controlled aircraft, solar-powered cars and other engineering projects. The facility will provide more space than the current metal building that houses the internationally competitive teams.

The university will renovate the Miner Recreation Building to house the design center. The building is located on the northwest corner of 10th Street and Bishop Avenue, across from Missouri S&T’s Gale Bullman Multi-Purpose Building.

Private funds will finance the project. The university had already raised $1.5 million of the $2.75 million needed to complete construction when Fred and June Kummer of Huntleigh Village, Mo., contributed $1.25 million for the center, which will be called the Kummer Student Design Center.

Missouri S&T Chancellor John F. Carney III announced the gift Feb. 16, 2010. The Kummers’ gift ensures that work will begin in May with completion by March 2011. Fred Kummer, the chief executive officer of St. Louis-based HBE Corp., is a 1955 civil engineering graduate of the university, which was then known as the University of Missouri School of Mines and Metallurgy.

The original design center idea was spearheaded by three other civil engineers: Richard Arnoldy, a 1969 civil engineering graduate of Missouri S&T and the retired CEO of ARCO Construction Co. Inc. in St. Louis; Robert Brinkmann, a 1971 civil engineering graduate and founder and president of R.G. Brinkmann Construction Co., based in Chesterfield, Mo.; and Barry Koenemann, a 1970 civil engineering graduate and CEO of United Construction Ent. Co. of St. Louis. Other recent major donors to the project include Michael Bytnar, a 1968 mechanical engineering graduate and the retired president of Nooter Corp. of St. Louis; and the Sunderland Foundation of Ashgrove Cement Co., Overland Park, Kan.

"Throughout the years, the Kummer family’s generosity has provided support for Missouri S&T’s most important initiatives in education and research," says Carney. "As Fred himself knows, the kind of practical, team-based experience our students gain from participating in student design teams better prepares them for the technological work force, and this gift will help Missouri S&T build on a solid foundation as a leader in preparing students for the future."

"Missouri S&T’s student design teams have an incredible record of success, and our students deserve to work and conduct business in a facility that provides the best laboratory and work space possible," says Kummer. "June and I are very pleased to be able to provide this support for such a world-class student operation."

Missouri S&T has built a strong reputation among technological research universities for its student design team success. S&T’s solar car team has won two North American solar races - Sunrayce’99 and the 2003 North American Solar Challenge - and its human-powered vehicle team has won several East Coast and West Coast championships in recent years. Last year, Missouri S&T’s Advanced Aero Vehicle Group was the top U.S. team in an international competition among student-designed and -built radio-controlled aircraft.

A major concern in renovating the Miner Recreation Building was relocating the indoor practice facilities it houses for intercollegiate teams. To address that challenge, a group of alumni and their spouses partnered to fully fund an indoor practice facility to be located south of the Gale Bullman Multi-Purpose Building.

Donors to the indoor practice facility are Keith and Pat Bailey, John W. and Kristie Gibson, and Steve and Gwen Malcolm, all of Tulsa, Okla. Keith Bailey is a 1964 mechanical engineering graduate of Missouri S&T and retired president and CEO of The Williams Companies Inc. of Tulsa, Okla. John Gibson and Kristie Gibson are both 1974 engineering management graduates of S&T and John is the president and CEO of ONEOK Inc. Steve Malcolm is a 1970 civil engineering graduate of S&T and is president and CEO of The Williams Companies Inc.
Solar Home Showcases at Nation’s Capitol

Show-Me Solar, Missouri S&T’s entry in the U.S. Department of Energy-sponsored Solar Decathlon, was the most-visited of all eighteen solar homes on the National Mall. The Solar Decathlon is a competition in which 20 international universities design and build a 100% solar-powered home over a 2-year cycle. In October over 21,000 people toured the house and marveled at the compact home’s soaring, open feel. [http://solarhouse.mst.edu/](http://solarhouse.mst.edu/)

The competition consists of 10 contests that range from Market Viability to Energy Balance. The rules are constantly refined, but it has consistently been to design a home that is no larger than 800 square feet and has a net energy usage of 0. Each team decides the exact shape of the home and technologies used therein.

The Missouri S&T builders were joined by students from Mizzou’s architectural design program, who came on board to help tackle the event’s increasingly high competition standards. Team Missouri finished in 11th place out of 20 teams, ahead of powerful teams from Virginia Tech, Penn State, Iowa State and Team Spain. The Missouri S&T team is one of only two universities that have competed in all four Solar Decathlons.

The newest of Missouri S&T’s Solar Decathlon entries will eventually join its three predecessors as part of the campus solar village, which continues to serve as research facilities, student rental housing, and a popular public outreach asset. For more information on the decathlon, please visit: [http://www.solardecathlon.org/](http://www.solardecathlon.org/).

American Solar Challenge in Rolla this Summer

Solar car racing returns to central Missouri on June 23rd when the Missouri S&T campus hosts an overnight stage stop on the American Solar Challenge (ASC).

The new race starts in Tulsa, Oklahoma, on June 20th and runs through parts of Kansas, Missouri and Illinois before ending in Chicago on June 26th. The Miners’ car, Solar Miner VII, features a major mechanical and aerodynamic shift from previous designs, and the Missouri S&T Solar Car Team, re-invigorated with many new members, expects to race this new vehicle back to the winners’ podium.

Immediately prior to the ASC race, Solar Miner VII will race in the Formula Sun Grand Prix (FSGP), a track endurance in Cresson, Texas starting June 16th. FSGP is the qualifying race for all college teams that hope to run in the American Solar Challenge. Miner fans will be able to follow the race excitement on two websites, solar car’s [http://solarcar.mst.edu/index.html](http://solarcar.mst.edu/index.html), and the SDELC’s award-winning [http://experiencethis.mst.edu](http://experiencethis.mst.edu) blog.

Scholarship Benefits Student Design Team Member

The 2009/2010 Charles Henry Hammerstrand Memorial Scholarship, established to recognize exceptional contributions by a Missouri S&T student design team member, has been awarded to Luke Sudkamp, a senior in civil and architectural engineering. Sudkamp, from St Louis, has held several key leadership positions with the Solar House team, culminating with his election as director of design and construction to the team’s most recent Solar Decathlon entry. Sudkamp says, “being a part of this team has enabled me to get much more out of college than just a degree.” He has a job lined up designing power transmission systems upon graduation.
Faculty Member Honored with Service Learning Award

Over the past two years, Dr. Anne Maglia, Biological Sciences, has carried over 25 service learning projects and addressed the tough issue of sustainability. Maglia was honored at the Feb. 1 Faculty Awards Banquet for engaging students and making service learning a part of the curriculum. Other nominees were Dr. Morris Kalliny, Business and Information Technology and Dr. Paul Worsey, Mining Engineering.

http://ugs.mst.edu/servicelearning.html

RPDC Helps with Haiti Relief Project

Missouri S&T's South Central Regional Professional Development Center (RPDC) recently served as a collection site for the "Kits 4 Kids" relief project for Haiti earthquake relief. A total of 3,072 personal hygiene kits were collected in Rolla, with 20 south central regional school districts participating in the project.

Missouri's Department of Elementary and Secondary Education organized the project. Eleven RPDCs statewide collected more than 30,000 kits that were assembled and donated by RPDC staff members also helped load the kits onto the Convoy of Hope truck on Friday, Feb. 5, for delivery to the Springfield-based relief organization, which will distribute the kits to children in Haiti.

"The response to this project has been overwhelming and heartwarming," says Commissioner of Education Chris L. Nicastro. "Students, parents and teachers found this to be an easy, inexpensive and tangible way for students to make a real contribution to children and families who are suffering in Haiti."

Missouri S&T honored 333 undergraduates for December 2009 Commencement, awarding overall 628 undergraduate and graduate degrees.
October 2009, we welcomed Tyrone Davidson, Academic Advisor. Originally from Jamaica, he first attended Southeastern Illinois College on a basketball scholarship, and then transferred to Missouri S&T, graduating with a Bachelor’s in History in 2008. Davidson is the third of four children of Lance and Lorna Davidson currently living in Jamaica. He still enjoys playing basketball when he can find the time. Having worked at Boys and Girls Town of Missouri, Davidson found that he enjoyed helping students be successful. Now as an advisor at Missouri S&T, he continues to help students grow and strengthen their abilities. He is delighted to be an advisor, and can be reached at x4738 or tyroned@mst.edu.

January, we welcomed Gayatri Bhatt, Assistant to the Vice Provost. Bhatt’s career in education and philanthropy has spanned across Missouri in Kansas City and St. Louis, as well as the DC metro area. Since 2005, Bhatt served UMKC School of Education impacting millions in private support and a record alumni participation rate. Bhatt earned her Bachelor’s in English from Missouri S&T, while serving as the Student Representative to the University of Missouri System Board of Curators. She earned her Master’s in Higher Education Administration with an emphasis in Student Affairs from UMKC. She is thrilled to return to Rolla to serve students and her alma mater and can be reached at x7600 or bhattg@mst.edu.

November 2009, we welcomed Diane Hagni, Coordinator for CERTI (Center for Educational Research and Teaching Innovation). She has served Missouri S&T previously with the Center for Pre-College Programs. She also did freelance writing for the Communications Office on several projects. Hagni earned her Bachelor’s in Journalism from the University of Missouri. Hagni can be reached at x7648 or hagnid@mst.edu.

August 2009, we welcomed Rachael Riley, Administrative Assistant for the First Year Program, Second Year Program, LEAD (Learning Enhancement Across Disciplines) and CERTI (Center for Educational Research and Teaching Innovation). Riley has served the University Missouri System since 2001, having previously served the Columbia campus. At UMC, she held positions within the College of Education and MU Direct: Continuing and Distance Education. She can be reached at x4608 or rileyra@mst.edu.

February, we welcomed Dr. Jana Neiss, Director of Teacher Education. Neiss served Drury University in St. Robert since 1993, the Rolla campus from 1995-2008 and as director of the St. Robert, Ft. Leonard Wood, and Rolla campuses since 2008. Neiss earned her doctorate in educational leadership from the University of Missouri, master’s in elementary teaching from Pittsburg State University, and Bachelor’s in Education from Ozark Bible College and can be reached at x4485 or neissj@mst.edu.
PROGRAM EVENTS for FACULTY

Seminars Support Advisors’ Professional Development

The office of Undergraduate Studies offers a series of beneficial advising development sessions for advisors to build Missouri S&T’s capacity to successfully assist students to better achieve their academic objectives. These local conferences provide critical insight on advising best practices and the relationship between advising and student academic success.

Join us for a light lunch and informative presentations from 12—1:30 pm in the Havener Center’s Meramec/Gasconade room. Respond to Beth Welter at bethw@mst.edu to reserve your spot.

What is a LASSI?
Presented by: Dr. Harvest L. Collier
March 1

Career Advising
Presented by: Dr. Kent Peaslee
March 15

Identify Students At-Risk for Academic Probation
Presented by: Dr. F. Scott Miller
April 5

50 Years of Reflection on Academic Advising
Presented by: Dr. Jerry Bayless
April 19

Top 10 Things Advisors Should Know
Presented by: Dr. Harvest L. Collier
May 3

Identify Students At-Risk for Academic Probation
Presented by: Dr. F. Scott Miller
April 5

50 Years of Reflection on Academic Advising
Presented by: Dr. Jerry Bayless
April 19

Top 10 Things Advisors Should Know
Presented by: Dr. Harvest L. Collier
May 3

Comments from Fall 2009 series

“Great seminar series!”

“Great program, keep refining…definitely worthwhile.”

“Very valuable – it's always valuable to hear about other instructor’s recent experiences.”

“Thank you for taking the time to give the presentation; as a young faculty member, I found it very informative and useful.”

“Terrific, timely, great presenters!”

“The students are always changing; keeping us “up-to-date” is helpful!”
Technology Conference in March

The 3rd Annual Teaching and Learning Technology Conference, sponsored by EdTech, will be held March 11-12 (St. Pat’s week). CERTI will be assisting with the event. This year’s theme is “Cyberlearning” – using technology to enhance the learning process for students.

The Keynote Speaker is Dr. Joel Hartman, Vice Provost for Information Technologies and Resources at the University of Central Florida. Dr. Hartman has been instrumental in leading the University of Central Florida in the area of online and blended learning.

Visit edtech.mst.edu to register.

Brown Bag Discussions to Explore Course Evaluations

CERTI, Missouri S&T’s faculty development center for teaching and learning, will host a series of brown bag lunch meetings discussing "S&T Course Evaluations: Beyond Question 7," this semester. Dr. Larry Gragg will moderate the first discussion at noon on Wednesday, Feb. 24, in 208 Norwood Hall. All faculty are welcome. Dessert and beverages will be provided. Using data he compiled from course evaluation research, Gragg will discuss the influences on how a course is rated; whether gender, course requirements or student grade level have any bearing; whether grades were inflated in the recent past; and whether high student evaluations reflect effective teaching.

Gragg and Dan Cernusca, instructional design specialist at S&T, will moderate subsequent discussions on Wednesday, March 24 and Wednesday, April 14. Respond to Diane Hagni at hagnid@mst.edu to reserve your spot.

Faculty Learning Community (FLC) Discussions

Using Wikis in Teaching
with Dr. John Hogan
Friday, March 12 from 2:20-3:20 pm
Butler-Carlton, room 121

How Can Clickers Impact Your Class?
Friday, April 9 from noon-1:00 pm
Norwood Hall, room 208

Check the CERTI website for more information at http://certi.mst.edu.

Jeff Thomas, assistant teaching professor in Civil, Architectural and Environmental Engineering, speaking at the Teaching and Learning Technology Conference last year, sponsored by Educational Technology (EdTech) with assistance from CERTI.
The Office of Undergraduate Studies has selected the following students to serve as ambassadors to share their university research experiences with state lawmakers in Jefferson City on April 29 for Undergraduate Research Day at the Capitol.

- **Ashley Banaszek**, Comprehensive Education, Training and Outreach in Advanced Electric Drive Vehicles: Project Assessment, Research Advisor – Dr. Richard Hall, Business and Information Technology
- **Nathaniel Carter and Megan Oldroyd**, Hydrothermal Chemistry as a Pathway to Convert Cellulosic Biomass to Fuel, Research Advisor – Dr. Klaus Woelk, Chemistry
- **Jingwen (Wendy) Chen and David Lecko**, Structural Health Monitoring with the SmartBrick Platform, Research Advisor – Dr. Sahra Sedigh, Electrical and Computer Engineering
- **Travis Hemsath and Matthew Struemph**, IED Crater Repair for Enduring Route Remediation, Research Advisor – Dr. John J. Myers, Civil, Architectural & Environmental Engineering
- **Justin Higginbotham**, Sources of Stockpile Gradation Variability in Aggregate Processing Plants, Research Advisor – Dr. Kwame Awuah-Offei, Mining Engineering
- **Kyle Holman and Jordan Tripp**, Learning Tools for Structural Analysis: Laboratory Modeling, Research Advisors – John Myers and Dr. Lesley Sneed, Architectural Engineering

The Office of Undergraduate Studies wishes to thank those departments that submitted nominations. For more information about this event, please contact Melissa Hutton x7585.

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**6th Annual Undergraduate Research Conference**

**Wednesday, April 7**

Students will showcase research efforts.

Registration deadline is March 16.

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**Interested in serving as a faculty judge?**

Please e-mail Melissa Hutton at mhutton@mst.edu

For more information, visit:

http://ugs.mst.edu/ugrc.html
PROGRAM EVENTS for STUDENTS

CALL FOR PAPERS
6th Annual Missouri S&T UNDERGRADUATE RESEARCH CONFERENCE
~ APRIL 7, 2010 ~

Attention Undergraduate Students!

REGISTRATION:
ALL ENTRIES MUST INCLUDE A DESCRIPTIVE ABSTRACT.

Abstracts must include a minimum of 75, and a maximum of 150 words.

All abstracts must be submitted electronically using the required abstract template.

- Students participating in the oral session are required to submit an abstract and research paper to complete their conference registration.
- Students participating in the poster session are required to submit an abstract to complete their conference registration.
- Only one entry per students will be accepted.
- Electronic registration is required.

This event provides opportunities for you to showcase your research efforts to the campus community and to the public. The research conference will include oral and poster sessions in the following categories. First ($750), second ($500) and third ($250) place prizes will be awarded in each category.

Oral Session Categories:
1. Arts and Humanities
2. Engineering
3. Sciences
4. Social Sciences

Poster Session Categories:
1. Arts and Humanities
2. Engineering
3. Sciences
4. Social Sciences
5. Research Proposals

Registration Deadline
MARCH 16, 2010

Students must submit their on-line registration form and supporting materials, (including abstracts and research papers), by the above deadline.

Materials will not be accepted after this date.

Download registration materials at: http://ugs.mst.edu/ugrc.html

For more information, contact the Office of Undergraduate Studies
105 Norwood Hall | Phone: 573.341.7276 | Email: ugs@mst.edu
Program Impacts Student Achievement

On-Track is a Missouri S&T program designed to help probationary students with motivation, goal setting, time management, study skills and higher education relational skills. The program was significantly redesigned for Fall 2009 using input from past participants. During the fall semester, 78 students participated in this program with an average 0.4 increase in term GPA over the Spring 09 semester. Areas of improvement identified by participants included: motivation, class attendance, study habits, self accountability and student/professor relationships.

Now in its sixth semester, over 110 students have registered to take part in this innovative program this spring. Participants are learning first-hand how the revised program is now touted as “for students by students”. The program is administered primarily by peer mentors under the direction of the Undergraduate Advising Office. The program is based on students dedicating 12 hours each semester to improving their academic setting over the course of one semester.

This spring’s On-Track program is centered on a collection of seven luncheon seminars, supplemented with one-on-one bi-weekly peer mentor/mentee meetings and specific activities prescribed to meet individual student needs. Collaboration with other support departments will be used to help empower students to become self-directed and motivated learners. By identification of root problems causing scholastic issues, students will be able make constructive changes to their academic behavior.

The Spring 2010 student mentors represent eight different academic departments ranging from education to engineering. Collectively, they average over 100 hours each of university credit with an average GPA of 3.43. Our mentors this semester are:

- **Avery Watkins**, Sicklerville, NJ – Computer Engineering
- **Brandi Andersen**, Belleville, IL – Chemical Engineering
- **Bryan Hogan**, Kansas City, MO – Architectural Engineering
- **Matt Hume**, St. Charles, MO – Engineering Management
- **Jessica Gibbs**, Kansas City, MO – Civil Engineering
- **John Furby**, Houston, TX – Mechanical Engineering
- **Patrick VerSteeg**, Cheyenne, OK – Chemical Engineering
- **Samantha Schussele**, Oakland Park, KS – Nuclear Engineering
- **Sarah Bax**, Dallas, TX – Civil Engineering
- **Stephany Rich**, Fulton, MO – Math Education

Matt Hume continues to serve as the lead mentor for the program.

For more information about the program, e-mail on-track@mst.edu, visit [http://advising.mst.edu/ontrack.html](http://advising.mst.edu/ontrack.html) or call the Undergraduate Advising office at 341-4424.
REMINDERS

Writing Center Achieves 100% Approval Rating

In Fall 2009, the Writing Center recorded 708 visits. Each students who visits the Writing Center is asked to complete a survey at the end of the tutoring session. Students are asked what the Writing Center can do to improve its tutoring services and whether or not they believe the sessions helped them improve their writing. In Fall semester 2009, 100% of the respondents stated that they believed the Writing Center did assist them in becoming more skilled writers. As the Writing Center continues to develop and expand their mission of tutoring, providing workshops, and offering presentations on the teaching of writing, they will seek to build on the positive response of last semester’s undergraduate students.

New Faces: Peer to Peer Support

Three tutors are departing, who are moving on in their senior year of study to pursue their careers after or near the time of graduation: Adam Bussmann, Erin Morris, and Justin Voss. All three were experienced, dedicated, and popular tutors. They will be greatly missed. We also welcome new undergraduate tutors Elissa Brown and A.J. Schafer, who join the Writing Center tutoring staff beginning this Winter semester 2010. Elissa—hometown Irvine, CA, Junior in Civil Engineering. A.J.—hometown Salem, MO, sophomore in English and Technical Communication.

Publication Accepted

Dean Reardon’s paper, “Writing Center Administration: Learning the Numbers Game” has been accepted for publication in the Spring 2010 issue of Praxis: A Writing Center Journal. In the article, he discusses the challenges of moving into a new administrative position in a time of national and state budget uncertainty. He also details the difficulties writing center administrators nation-wide are facing, and how our Writing Center staff prepared to meet our difficulties and challenges.
Office of Undergraduate Studies
(All phone numbers are in the 573 area code and 341 prefix.)

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Beth Welter, Senior Secretary x4424 bethw@mst.edu

DEADLINES:

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