



Undergraduate
Research Center

U R S C E N E



Inaugural Issue

March, 2007

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Special points
of interest:

- URSCP Proposal Deadline 3-20-07
- Scholars Week April 2nd-6th
- Website www.mtsu.edu/~urscp/index.html

Welcome to the inaugural issue of the URC Newsletter!

The plan is to publish an issue each semester so please send brief entries about the research and creative activities of undergraduate students to Peggy Duszynski at duszynsk@mtsu.edu. The Undergraduate Research Center (URC) serves a number of purposes, all of which further MTSU's commitment to student-centered learning, one of three pillars in our blueprint for progress—the Academic Master Plan. The many purposes of the

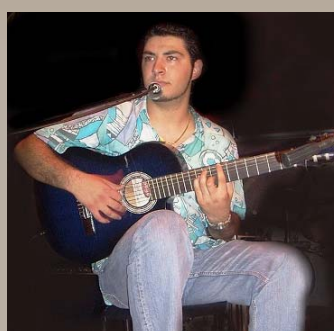
URC are listed on its web page, <http://www.mtsu.edu/~research/urc.html>, but the purpose highlighted in this inaugural issue is the pursuit of engaging undergraduate students in research, scholarship, and creative activities and reporting the successes of the students and their faculty mentors. The URC hopes to expand the campus's UG research culture by serving as a source of information on opportunities for research and creative activities for students

and by communicating exciting successes to media outlets including Congressman Gordon's office. I hope you find this inaugural issue informative. Please pass it on to undergraduate students who you think will be interested in becoming an active member of MTSU's UG research and creative activities culture.

Sincerely,
Dr. Diane Miller, Director

URSCP Funds over \$69,000 to Undergraduate Students

The Undergraduate Research, Scholarship, and Creative Projects (URSCP) Committee announces grant recipients for Spring 2007. These students were awarded more than \$63,000 in stipends, as well as \$5,900 for supplies and travel. Those funded at the Assistant level contribute to a faculty member's project, and those funded at the Scholar level take more ownership of their project while collaborating with one or more faculty members. A record setting 41 proposals were submitted for consideration last October, with the majority (14) coming from the College of Liberal Arts. Students in the College of Education and Behavioral Science contributed 12, the College of Basic and Applied Sciences submitted 10, and 5 proposals came from the College of Mass Communication. Congratulations to all of these students and the faculty mentors who are contributing to the development of these budding scholars!



Silviu Ciulei has traveled throughout the U.S. to attend classical guitar competitions and master classes. In Memphis, TN he won first place in the highly respected Beethoven Club Young Artist Competition. Read more about Silviu's travels on page 4.

16 Assistants

Steven Byrd	Yuki Matsumoto
Eric Lee Carlson	Phil Njoroge
Allison Cummings	Brittney Oliver
Eric Fields	Abbey Rutherford
Michelle Francescon	Jacob Spaulding
Rachel Green	Riki Lynne Spence
Josh Hughes	Stephen Trageser
John Ingle	Brandon James Wahl

21 Scholars

Andrew Adams	Christopher Davis	Erin Meaker
Erin Archer	Travis Denton	Terri Proctor
Nate Brady	Lacey Fleming	Adam Shulman
Silviu Ciulei	Joshua Gallaher	Brent Stephens
Matthew L. Collins	Wynter Gilson	Lauren Stewart
Kimberly Cubit	Justin Higgs	Details for submitting
Brandy Dacus	Jennifer Jeliff	a proposal are on
Collin Davey	Claire Marshall	page 4.

SCHOLARS WEEK

April 2-6

MTSU's Scholars Week helps to increase everyone's awareness and appreciation of scholarship at MTSU. This year, Scholars Week activities include talks, readings, performances, posters, multimedia performances, as well as invited speakers and luncheons. Each college will have a designated day to showcase its scholarship. The poster and multimedia exposition for faculty, graduate and undergraduate research will occur on Friday afternoon, April 6, in the Tennessee Room of the James Union Building.

Monday, April 2

Scholars Week Kick-Off

11:30 pm in Library Quad

Provost Gebert and VPR Allen

Contact: Allison McGoffin (x2953)

Featured College: Business

Poster Session (South Lobby BAS)
12:30 -2:30 pm

Featured Speaker: Dr. Lee Marvin

"Techonomics"

3:00 pm in the State Farm Room

Contact: Dr. Jill Austin (x2736)

Tuesday, April 3

Featured College:

Basic and Applied Sciences

Hands-On Learning Showcase
12:00 noon-2:00 pm (Library Quad)

In case of rain: KUC 1st floor lobby

Contact: Dr. Ginger Rowell (x5540)

Office of Research and Sponsored Programs

Grant-Writers and Mentors Reception

2:00-3:30 pm, Faculty Senate

Contact: Lisa Thayer (X5005)

Wednesday, April 4

Featured College: Liberal Arts

Talks, Panels and Performances
Humanities and the Arts

12:30 - 5:00 p.m.

Honors Building Room 117

Contact: Dr. Mark Byrnes (x2351)

Thursday, April 5

Featured Colleges:
Mass Communication

Education and Behavioral Science, and
Graduate Studies

Life's Major Questions Luncheon
11:30 am - 1:00 pm

Hazelwood Dining Room, JUB

\$5 tickets in advance

Contact: Cyndi Butler (x5897)

College of Graduate Studies
Conversation Hour on "Bioterrorism
and the Corrosion of Truth in the Age
of Enron: Ethics in the University and
the Real World"

with Drs. Thomas May and Thomas
Cooper

2:00-3:30 pm

2nd Floor Conference Room

Honors College

Contact: Dr. Pam Knox (x2840)

Thursday, April 5, cont

McNair dinner and lecture

4:30 - 6:00 p.m., TN Room, JUB

Guest Lecturer: Dr. Eugenia Kalnay

Contact: Dr. Diane Miller (x5472)

College of Liberal Arts
Windham Lecture

Ms. Rory Kennedy

5:00 pm in State Farm Room, BAS

Contact: Connie Huddleston
(494-7628)

Friday, April 6

University-Wide Poster and
Multimedia Exposition

Faculty mingling and lunch:
12 noon - 12:30 pm

Faculty Session: 12:30 – 1:30

Undergraduate and Graduate
Student Session: 2:00-4:00 pm

Awards at 4:00 pm

Tennessee Room, JUB

Refreshments will be served

Contact: Dr. Andri Friedli
(x2071)

Please post this page in an area visible to faculty and students and encourage everyone to participate in at least one event during the week. For detailed information about the week's events, go to:

<http://www.mtsu.edu/~research/scholarsweek.html>

"Scholars Week activities include talks, readings and posters as well as invited speakers and luncheons' performances, es, posters, multimedia performances, as well as invited speakers and luncheons"

Stepping Up Undergraduate Research at MTSU (Step^{MT})

Undergraduates at MTSU are very fortunate to have a variety of opportunities for participation in research with MTSU faculty. One of those opportunities is through the STEP^{MT} program. STEP^{MT} stands for "STEPPing Up Undergraduate Research at MTSU" and is a \$1.6 million dollar grant project supported by the National Science Foundation. By focusing on undergraduate research, the STEP^{MT} project strives to improve graduation rates of students in the science, technology and mathematics disciplines. STEP^{MT} provides funding to support student research both during the

academic year and the summer.

During the academic year, students can apply for STEP^{MT} grants to conduct research with a faculty mentor. Students new to research can apply to be a research assistant and receive \$500, and students with research experience can apply for a \$1,000 award to support their research project. The deadlines for STEP^{MT} academic research grants are early in the fall and spring semesters.

During the summer, STEP^{MT} supports two distinct undergraduate research programs, Summer Research Teams and Industry

Experiences. These programs provide opportunities for MTSU students, even those new to research, to earn between \$3,000 and \$4,000 depending on their experience. Another option to conduct research during the summer is the Industry Experience program (STEP-IN), which provides research opportunities for experienced (junior/senior level) students to work in a company on real-life research problems.

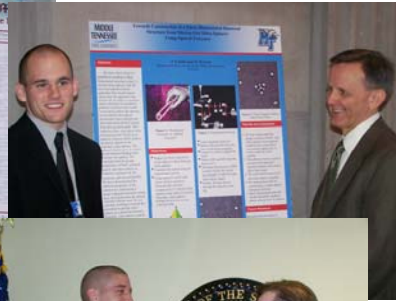
Applications, deadlines, and additional information about these programs can be found at the STEP^{MT} website, www.mtsu.edu/~stepmt.

Posters At the Capitol—February 7th, 2007

Lacey Fleming ↓



Dr. Robert Carlton and Jeremy Curtis ↓



Dr. Diane Miller and Collin Davey ↑



Richard Sharpe and Representative Sherry Jones ↑

Adam Shulman & Representative Curt Cobb ↑

Terri Proctor and TBR Chancellor Charles Manning ↑



Brandy Dacus and Representative John Hood ←



Brandy Dacus and Senator Joe Haynes ←

Seven students presented posters of their research at the State Capitol in Nashville: Collin Davey, Foreign Languages; Lacey Fleming, Sociology; Brandy Dacus, Anthropology; Teri Proctor, Psychology; Adam Shulman, Physics; Jeremy Curtis, Physics; and Richard Sharpe, Biology. The students also met personally with their legislators and the governor, and attended a luncheon for students from all six TBR universities.

How to Submit an URSCP Proposal

1. **Read and study** all the information at www.mtsu.edu/~urscp/index.html
2. **Talk** to a member of the faculty about serving as a research assistant on a project they are doing; or, ask them to serve as a mentor for a project you want to do.
3. **Complete** an application available at www.mtsu.edu/~urscp/index.html
4. **Deliver** the original plus 14 copies to Room 103 Midgett Building no later than 4:00 p.m. on the deadline day.

Deadlines

First Tuesday in October
Third Tuesday in March

For more information:
E-mail: duszynsk@mtsu.edu
Phone: 615-904-8463

Visit: Undergraduate Research Center Office
@ Room 103 Midgett Building



New Logo?

No, it is 25 microscopic silica spheres! And by microscopic, we mean that if you put these spheres on a line and measure the actual length, it would not even come close to the thickness of a human hair. **Adam Shulman**, Physics, and **Jeremy Curtis**, Mathematics, have been working with Dr. Daniel Erenso since last summer.

By attaching these spheres and using optical tweezers, Adam has been studying the physical properties of blood cells. His research could lead to advancements particularly in the medical research fields. Jeremy has been trying to construct artificial stable crystal structures from these spheres, which could potentially have applications in electronic and optical devices.

Part of the project has already been accepted for publication in the Journal of Modern Optics, one of the top-tier journals in optics.

MTSU at U.S. Capitol

Congratulations to Brent Stephens (Math) and his faculty mentor Dr. Xiaoya Zha. Brent's abstract has been selected for presentation at the annual Posters-on-the-Hill in Washington, D.C., April 25th. Brent is only one of 60 undergraduate students from across the nation whose research was selected for presentation to people in the U.S. Congress and Senate. Brent's project was funded by MTSU's URSCP Committee.

Student Travels



Silviu Ciulei has used his URSCP Creative Activity Award to proudly represent MTSU across the country as a talented classical guitarist. With the support and guidance of his mentor, Dr. Bill Yelverton, he is MTSU's first international undergraduate music scholar. In both 2005 and 2006, along with funding from the music department, he attended the Columbus State Guitar Competition at Columbus State University in Columbus, GA, the Texas Guitar Competition in Dallas, TX where he was one of six finalists in 2006 together with guitarists from Australia, France, Nicaragua, Uruguay and the USA., and, the Mississippi Symphony

Orchestra Young Artist Concerto Competition in Jackson, MS, where he won 2nd prize in 2005. In addition to his first place win at the Beethoven Club Young Artist Competition, the internationally acclaimed Schadt Concerto Competition in Allentown, PA chose Silviu as one of nine semifinalists, awarding him a medal for his performance. As a college Freshman, he was the youngest competitor, performing along side other guitarists with Masters Degrees and earned Doctorates.

Silviu also had the opportunity to travel to Los Angeles to attend a flamenco guitar master class with the famous Adam Del Monte. His flamenco band was featured at the

Guitar Foundation of America International Festival at Oberlin Conservatory in Ohio in 2005.

But stated as most important to him was his performance of the Mauro Giuliani Concerto in A major op.30 with the Nashville Philharmonic Orchestra at the Parthenon in Nashville. Silviu remarked, "Not a lot of guitarists play this great masterpiece with an orchestra, especially at my age." He also played this concerto last year with the Black Sea Philharmonic in Constanta, Romania, his birth place.

Silviu will again be traveling this spring to add three more competitions to his resume.

"Not a lot of guitarists play this great masterpiece with an orchestra, especially at my age."