



## 2009 Summer Research Institute

### 2009 Summer Research Institute Application

Missouri Western State University offers incoming freshman and qualified high school students the opportunity to work as part of a research team with one faculty member and one currently enrolled upper division undergraduate student during an **8 week** program during the **2009 summer session** as part of Western's annual Summer Research Institute (SRI). SRI is designed to bring students and faculty together to engage in meaningful and significant scholarly research. This is a unique opportunity for area high school students who are interested in engaging in research activities while they are still in high school.

This summer, there will be 7 SRI research teams in the areas of **biology, english, foreign languages & journalism, mathematics, and nursing**. Each team will consist of a faculty team leader, one Missouri Western student and one to three entering freshman or eligible sophomore (to be a junior in the Fall) or junior (to be a senior in the Fall) high school students. The SRI will coincide with Western's summer academic schedule from **June 1 through July 24, 2009**. Each team will present their results of their projects at a final symposium event on **July 24** including a reception that is open to the public.

#### **Who is eligible to participate?**

- Incoming freshman students who have committed to enrolling at Missouri Western State University in Fall 2009.
- Current high school juniors or sophomores.
- To be accepted, students should have a minimum **3.0 GPA**, be in the **upper 25% of their high school class**. **ACT composite score of 24 or higher** is desirable but not absolutely required.
- SRI participants will receive a **scholarship to pay for two credit hours of college research credit**.

**How to apply:** To apply to the Summer Research institute complete the following materials:

- 1) SRI application form,
- 2) A Western admissions application form (includes a \$15 fee if accepted into the program)
- 3) Include a current high school transcript and two letters of recommendation (preferably from teachers). **All materials must be received by April 17, 2009 for full consideration.**

#### **What types of projects are available?**

Brief descriptions of each team's projects are available with the application materials, or you may contact the SRI Director or the team leaders listed below.

**Applications are due by Friday, April 17th.** Acceptance to the Missouri Western Summer Research Institute will be determined on a competitive basis. (If you have already filled out a MWSU application form, applicants will not need to complete another one or pay the application fee.) Send completed application materials to Summer Research Institute c/o Dr. Joseph Bragin, Interim Director; Office of Research, Grants & Sponsored Programs, Missouri Western State University, 4525 Downs Drive, St. Joseph, MO 64507. If you need additional application materials or information contact (816) 271-5639.

## 2009 Research Team Leaders and Project Titles by Department

### Biology

Filled for  
2009

- **Dr. Todd Eckdahl** (with Dr. Jeff Poet from Mathematics) Project: **Establishing a Connection between the SMART Program of Protein Physical Modeling and iGEM Synthetic Biology Research.**  
You may contact Dr. Eckdahl at [eckdahl@missouriwestern.edu](mailto:eckdahl@missouriwestern.edu) or by phone (816) 271-5873.
- **Dr. Kurt Hartman** Project: **Vegetation, seed bank, and environmental changes along a topographical gradient in a loess hill prairie ecosystem.**  
You may contact Dr. Hartman at [khartman3@missouriwestern.edu](mailto:khartman3@missouriwestern.edu) or by phone at (816) 271-4382
- **Dr. Karen Koy** Project: **Relationship between soil type and vegetative ecosystem in the Loess Hills of northwest Missouri.**  
You may contact Dr. Koy at [kkoy@missouriwestern.edu](mailto:kkoy@missouriwestern.edu) or by phone at (816) 271-4436.
- **Dr. Mark Mills** Project: **Population Ecology and Metapopulation Dynamics of Turtles on Missouri Western State University's Campus.**  
You may contact Dr. Mills at [mmills3@missouriwestern.edu](mailto:mmills3@missouriwestern.edu) or by phone (816) 271-4384.

### English / Foreign Languages / Journalism

- **Dr. Michael Charlton** Project: **Examining Course Requirements for Programs in Technical Communication.**  
You may contact Dr. Charlton at [mcharlton@missouriwestern.edu](mailto:mcharlton@missouriwestern.edu) or by phone (816) 271-4310.
- **Dr. William Church** Project: **Council of Undergraduate Literary & Arts Magazines (CULAM).**  
You may contact Dr. Church at [church@missouriwestern.edu](mailto:church@missouriwestern.edu) or by phone at (816) 271-5966.

### Mathematics

Filled for  
2009

- **Dr. Jeff Poet** (with Dr. Todd Eckdahl from Biology) Project: **Establishing a Connection between the SMART Program of Protein Physical Modeling and iGEM Synthetic Biology Research.**  
You may contact Dr. Poet at [poet@missouriwestern.edu](mailto:poet@missouriwestern.edu) or by phone (816) 271-4593.

### Nursing

- **Dr. Pi-Ming Yeh** Project: **Influences of spiritual well-being, coping, and care continuity on family caregiver burden and mental health.**  
You may contact Dr. Yeh at [pyeh@missouriwestern.edu](mailto:pyeh@missouriwestern.edu) or by phone at (816) 271-4250.

Send completed applications to:  
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