

**Geochemistry & Ecology of Red Mat Systems (GERMS)
Undergraduate Summer Research Program**

Red Layer Microbial Observatory (RLMO)
National Science Foundation
Western Oregon University
Yellowstone National Park



**NSF-MO Summer Stipend Contract – Student PARTICIPANT ONLY CATEGORY
Return by Friday June 8, 2007**

Project Title: Geochemistry & Ecology of Red Mat Systems (GERMS) Research Experience
Advisor/Supervisor: Sarah Boomer

Support Time: July 14, 2007 through July 20, 2007, according to the following schedule. Hours provided reflect the times planned for training experiences when advising and equipment is available; some days will not require all hours.

Date	Activities	Included Support
July 13	Planning Meeting (9-12 a.m.)	None, receive stipend checks and per diem (cash)*
July 14	Drive to Idaho Falls (12 hours)	Transportation, lodging, all day per diem*
July 15	Drive to West Yellowstone via Tetons	Transportation, lodging, all day per diem*
July 16	Imperial Research	Transportation, lodging, breakfast/lunch, dinner per diem*
July 17	Hillside Research, Old Faithful sightseeing	Transportation, lodging, breakfast/lunch, dinner per diem*
July 18	Canyon sightseeing	Transportation, lodging, breakfast/lunch, dinner per diem*
July 19	Fairy Research	Transportation, lodging, breakfast/lunch, dinner per diem*
July 20	Drive Home (15 hours)	Transportation, lodging, all day per diem*
July 23-27	Microbiology Lab Open – Finish Portfolios	None

Travel support does not include meals during the drives and nightly dinners in the field. See support notes below for information about per diem rates.

Trip Support Includes: DRIVER/PARTICIPANT CATEGORY

(1) \$175 stipend for each participant, classified as a student financial aid stipend. This check will be available at the Planning Meeting July 13, 2007. To receive funds, students must have completed, signed, and mailed this contract, the volunteer liability form, and the registration form to Sarah Boomer (Dept. of Biology, Western Oregon University, 345 Monmouth Ave., Monmouth, OR 97361) by no later than June 1, 2007 at 3:00 p.m.

(2) \$225 cash per diem, reflecting the following travel/trip schedule. These funds will be available at the Planning Meeting July 13, 2007. To receive these funds, participants must have completed, signed, and mailed this contract, the volunteer liability form, and the registration form to Sarah Boomer (Dept. of Biology, Western Oregon University, 345 Monmouth Ave., Monmouth, OR 97361) by no later than June 1, 2007 at 3:00 p.m.

Date	Activity	Meals	Per diem per person (9 total)
July 14	drive to Idaho Falls	ALL per diem	\$45
July 15	drive to West Yellowstone	ALL per diem	\$45
July 16	Research – Imperial	D per diem, B/L group*	\$22.50
July 17	Research – Hillside	D per diem, B/L group*	\$22.50
July 18	Research – Canyon	D per diem, B/L group*	\$22.50
July 19	Research – Fairy	D per diem, B/L group*	\$22.50
July 20	Return home	ALL per diem	\$45
		<i>Total per diem/person</i>	\$225

(3) 2 independent study credits (\$45 cost covered by grant) – enrollment required, pass/no credit option. In accordance with Biology Department lab attendance policy, three unexcused, missed activities over the course of the program will constitute a “no credit.”

(4) Travel costs associated with the field portion (transportation, hotels, and some meals). These are outlined above (under “Included Support” above).

Project Description and Goals: The goals of this project have been established and approved by the NSF-Microbial Observatory grant authored by Sarah Boomer. Using materials collected at long-term study sites in Yellowstone, students will assess microbial diversity using molecular, microscopic, and chemical methods. Data will be hand-logged in daily notebooks and electronically or digitally incorporated into existing databases or web-based portfolios.

Health and Safety Understanding: It is understood that this stipend may not cover every working hour in the lab or field. This means that a portion of this project experience is volunteer and, by definition, stipend recipients will be covered by the WOU Volunteer and Liability Agreement form. Research activity participants will follow safety rules and regulations in the lab and in the field to minimize risks while participating in this project.

Signatures reflect commitment to this contract, stipend, and course.

Recipient Name

signature and date

Sarah Boomer, Ph.D.,

signature and date

Darin E. Silbernagel
Director of Business Services

signature and date