

2010 Summer Internships

at the

Center for Ohio River Research & Education
Thomas More College Biology Field Station

(www.thomasmore.edu/fieldstation)



The Center for Ohio River Research & Education at the Thomas More College Biology Field Station is pleased to announce its 2010 Summer Research Internships for undergraduate students. Internships are primarily in the field of aquatic biology and include projects in the areas of animal husbandry, aquatic toxicology, big river sampling, biomonitoring, DNA sequencing, and environmental science. Funding for these projects has come from a variety of grants, including the Hamilton County Park District, the Sanitation District, the Duke Energy Corporation, the United States Environmental Protection Agency and Thomas More College. Internships include a \$2500 stipend, free on-site housing and academic credit. (Work-study positions and outreach positions are also available for qualified interns. In addition, two courses: Aquatic Biology and Aquatic Toxicity will be offered.)

Eligibility (*These are the minimum requirements for eligibility.*)

- Good Academic Standing and a minimum 2.00 GPA
- Successful completion of General Biology I & II or General Chemistry I & II (or equivalent courses)
- Permission from the Student's Academic Advisor

Application Materials (*Hard copies or electronic applications are acceptable.*)

- Cover Letter (*that addresses one's interests and motivation, relevant experiences and long-term professional goals*)
- Letter of Recommendation (*that addresses the applicant's academic strengths, potential as a researcher and other attributes, relevant to field and laboratory work in aquatic biology*)
- Application Form (*enclosed*)



- Submit all application materials to:

Chris Lorentz, Ph.D.
Professor of Biology
Thomas More College
333 Thomas More Parkway
Crestview Hills, KY 41017

chris.lorentz@thomasmore.edu

Applications are due by Friday, March 19, 2010

Brief Descriptions of the Summer Internships

I. Research Internships (*\$2500 stipend—full position and \$1250—half-time position*)

There are five full-time positions available and up to five half-time positions. In addition to a stipend, all interns will receive free on-site housing, if so desired. Academic credit can also be earned.*

The CORRE Interns will be involved with one or more of the following projects:

- **The Duke Energy Ohio River Study** This study is part of the long-term monitoring of the Ohio River near Zimmer Power Plant in Moscow, OH. Work includes taking chemical readings and collecting fish with gill nets, hoop nets and electrofishing during the months of June & July. The hours generally are from 9-12 in the mornings and 6-9 in the evenings (M-F). Night electrofishing from 9-12 pm will occur eight times throughout the study. As part of this study, fish tissues will be collected for a DNA sequencing project. This project is sponsored by the DUKE Energy Corporation.
- **N. KY Stream Assessments:** The Sanitation District of Northern Kentucky will be conducting extensive fish and macroinvertebrate stream surveys throughout the summer, beginning in May. Interns will assist the SD1 biologists with their field sampling. Activities include measuring water chemistry, collecting fish & macroinvertebrates and conducting environmental assessments of the areas. All work will occur during the day (Monday-Friday) and offers relevant experience for those interested in environmental consulting.
- **Animal Husbandry and Aquatic Toxicology:** The Center has three on-going projects that entail the maintenance of tanks and the care of live organisms, including fish, mussels and other aquatic invertebrates. These animals are used in applied research studies sponsored by the USEPA, the Newport Aquarium and the Ohio State University, including toxicity testing, monitoring of drinking water and mussel conservation. Most of this research will be in the laboratory. Interns will learn husbandry skills and the USEPA freshwater acute and chronic standard effluent, water and sediment toxicity methods.
- **Other Smaller Projects:** At the Center, there are a number of other research projects in which the interns may choose to become involved on a voluntary basis. These include curation of a large herpetologic & ichthyologic fluids collection, a survey of Miami Whitewater Lake for the Hamilton Country Park District and an intensive field study of the Asian carp species complex (namely bighead & silver) in the Ohio River.

**For interns who wish to earn academic credit for their research, they may register for 1-2 credits in the fall semester at their home institutions. The expectations for these credits will be outlined prior to registration and the work will be evaluated during the summer months and during fall semester.*

II. Other Positions (*Interns are eligible to apply for additional positions at the Biology Field Station.*)

A. Work Study Position (10 hrs/week at \$7.50/hr throughout the summer) This work entails a variety of general maintenance tasks, including equipment/boat maintenance, landscaping and custodial chores. The hours are flexible and determined individually by each intern and the Field Station Director.

B. High School STEM Camp Mentor (July 11-July 15, includes a \$100 stipend, plus meals & activities) Approximately 15 high school students will participate in a weeklong STEM camp. College student mentors will stay in the residence hall with the campers and assist in the daily activities of the camp which include stream & river sampling, water chemistry, trips to the Thomas More Observatory & Newport Aquarium.

III. Summer Courses: Two summer courses will be offered at the Field Station: BIO308: Aquatic Biology (May) and ENV355: Aquatic Toxicity (June & July). Interns are eligible to enroll in these, if so desired.

Field Station Internship Application Form

(Please submit this form along with cover letter and letter of recommendation by March 19, 2010.)

Name: _____ Date of Birth: _____

School: _____

Permanent Address: _____

Phone: _____ Email: _____

Class Level: _____ Major(s): _____

Academic Advisor(s): _____ GPA: _____

Career Plans: _____

Relevant Coursework and/or Relevant Experiences: _____

➤ Indicate the projects (and courses) in which you are interested (*check all that apply*):

DUKE Energy Ohio River Study Other Research Projects _____

N.KY Stream Assessments Work Study Position

Animal Husbandry/Aquatic Toxicology High School STEM Camp Mentor

Aquatic Biology Course in May Aquatic Toxicity Course in June & July

➤ If selected, would you like to earn academic credit for your experiences? Yes No Unsure

➤ If selected, would you like to live at the Field Station?

Yes No Unsure

The housing at the Thomas More College Biology Field Station currently consists of four 5-bedroom houses, each complete with a living room, kitchen, and bathroom. (Washers & dryers are available on site.) Interns typically share a room with one other person or may receive a single room. Room assignments are made according to gender and age.

