



### **Campus Life**

**Residential** Students live in a UAF residence hall with a RAHI roommate and full-time residence staff who supervise, tutor, and give support to students to live comfortably and to work efficiently. Students are divided into family groups of roughly eight each. Weeknight study hours are required and tutors are on hand to help with all courses.

Students eat meals at the campus dining facility.

Recreation Recreational offerings on weekends are available, with a fun, stress relieving midterm break weekend outing. Student Recreation Center, Wood Student Center, and Patty Pool are among campus recreational facilities available for use.

**Graduation** A cap and gown ceremony graduation ends the program on July 11 followed by an evening banquet. UAF tuition waivers are awarded to the top two academic students in RAHI. RAHI Research students are eligible for a number of scholarship and academic recognition awards.

"I really enjoyed the opportunities that I wouldn't normally have had, from working in a lab on real research to presenting a poster of my findings..."

-Marlena Acord (Class of 2010)

### Is RAHI Research for you?

Are you curious? Not afraid of hard work? Willing to really stretch your mind? Ready for a challenge? RAHI Research is all of that and more. You'll learn to be a competent and confident part of a lab team, taking part in the real day-to-day world of a university biological research lab. Methods you learn are also used in forensics, new drug discovery, biotechnology, and medical research. Come on – jump into RAHI Research!

#### For more information, contact

Denise Wartes, RAHI director, or Tim Murphrey, RAHI assistant manager Toll-free 1-800-478-6886 rahi@alaska.edu www.uaf.edu/rahi P.O. Box 756305, Fairbanks, AK 99775-6305

Paige Gingrich, RAHI Research and Alaska BioPREP Coordinator, or Sue Hills, Alaska BioPREP Director Voice 907-474-5106 Fax 907-474-5326 • bioprep@alaska.edu.

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Rural Alaska Honors Institute and Alaska BioPREP present

# RAHI RESEARCH 2013



- A six week summer residence program on the University of Alaska Fairbanks campus
- Work in a research lab, learn genetics and molecular biology
- Integrated with RAHI

# **APPLY ONLINE**

www.uaf.edu/rahi

Program dates: May 28 to July 12, 2013

**Application deadline:** March 1, 2013





# on the Frontier of Biology

ost of the amazing advances of the 20th century were the result of scientific breakthroughs in physics; in the 21st century, discoveries in biology, especially genetics, will revolutionize our lives. From personalized medicine to understanding cancer and infectious diseases, modern molecular biology is the foundation. This course gives you the confidence and skills for undergraduate molecular biology research as you begin college rather than waiting until you are a junior or senior, making the material more interesting and relevant.

You will start with lab methods such as pipetting and work up to DNA extraction, electrophoresis, polymerase chain reactions, and cloning — backed up with the fundamental concepts of biochemistry and genetics necessary to understand the research. It is accelerated, concentrated, and fascinating.

Your new knowledge and skills will be put to use as you work alongside University researchers in one of the many biological labs at UAF. You will become part of the lab team — conducting research, discussing results, taking part in the discoveries as they happen — all under the mentorship of an experienced graduate student mentor.

## **RAHI Research Program Details**

#### Curriculum

UAF courses are offered for full university credit (8 to 10 credits). Completion of the RAHI Research courses will give the student the skills for undergraduate research or work in a molecular biology research lab. The integrated, intensive RAHI Research program includes scientific writing, lab math, molecular biology theory and practice, and ethical discussions of the responsible conduct of research. Credits earned may help satisfy some requirements for high school graduation, depending upon your school district policy. Course work loads are substantial. With small classes and individual research mentors, RAHI Research has a safety net to give individual help and encouragement for all students.

### To Apply

To apply, submit a RAHI Research application, available at www.uaf.edu/rahi or from your science teacher or school counselor. You will be notified by mid-April of the decision. Not everyone is accepted. To be successful you should:

- Be committed to earning a college degree
- Have a cumulative GPA of at least 3.0
- Finish your junior or senior year in 2013
- Be 18 or younger on August 1, 2013
- · Read at or above grade level
- Have taken a previous RAHI chemistry class, high school biology, chemistry, or genetics class
- Be curious and ready to stretch your mind!

### **History of Rural Alaska Honors Institute**

RAHI was founded at the request of the Alaska Federation of Natives in 1982 to prepare rural and Alaska Native high school students for academic excellence and college success. RAHI II Next Step, now known as RAHI Research, was added in 2007 to give high school students in-depth knowledge of molecular biology and experience working in research labs to understand research and modern biology and to encourage students to major and graduate in the sciences.

### **Student Safety**

Responsibility to self and to each other, plus university and state law all combine to shape RAHI rules of conduct outlined in a student contract. Safety, comfort, and the need to ensure an atmosphere that supports learning are all objectives of this policy. Students are expected to attend classes, be prepared and on time, and participate in program social events. Students respect each other, instructors, and residence staff, as well as property. RAHI Research students work in labs with research-grade equipment and materials and will complete a lab safety training course.

**Permission to Leave Campus:** Students may be checked out to leave the campus only with adults, approved in writing, in advance, by parents or guardians, and only at times that do not conflict with academic schedules. Students may not be checked out overnight or weekends.

#### **Schedule and Costs**

Travel to Fairbanks is May 28; orientation is May 29. The fast-paced RAHI Research program will begin after orientation on May 30. Students may not start RAHI Research late or leave early. No late starts! No early departures! If you quit and leave before completion you will not graduate or earn college credits.

**Costs** All program costs (\$11,000 per student for RAHI Research) including travel, books, supplies, room, tuition, board, and weekly stipend are provided through the program and are free to students accepted into the program.

"I now understand how valuable actual experience was in conjunction with taking classes, as it makes the material more tangible and therefore easier to learn."

—Ben Renshaw (Class of 2009)