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

Rural Alaska Honors Institute presents

RAHI-II

Next Step

2011

Program dates: May 31 to July 14, 2011

Application deadline: March 28, 2011

“Is RAHI-II Next Step for you?
Are you curious? Not afraid of hard work? Willing to really stretch your mind? Ready for a challenge? Next Step 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 – take the Next Step!

For more information, contact

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Blaze Your Own Trail on the Frontier of Biology

Most 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 — attending lab meetings, discussing results, taking part in the discoveries as they happen — all under the mentorship of an experienced graduate student mentor.

Curriculum

UAF courses are offered for full university credit (7 to 11 credits). Completion of the RAHI-II Next Step course will give the student the skills for undergraduate research or work in a molecular biology research lab. The integrated, intensive RAHI-II Next Step course includes scientific writing, lab math, molecular biology theory and practice, and ethical discussions of the responsible conduct of research. Students may also choose either Alaska Native dance or swimming for exercise and to get to know the other RAHI students. Credits earned may also 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-II Next Step has a safety net to give individual help and encouragement to those who may struggle from time to time.

To Apply

To apply, submit RAHI-II Next Step 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
- Finished your junior or senior year in 2010
- Be 18 or younger on August 1, 2010
- Read at or above grade level
- Have taken a previous RAHI chemistry class, high school biology, chemistry, or genetics
- Be curious and ready to stretch your mind!

学生安全

责任自我，并且相互之间，加上大学和州法律，所有结合起来，以形成RAHI的行为规则。学生应该遵守这些规则，确保一个支持学习的氛围。学生应该参加课程，并确保课程不冲突。学生可能不能离开课程或早退。

权限离开校园

学生可能不会在得到通知之前暂时离开或周末。

日程表和费用

前往费尔班克斯是5月31日； orientation is June 1. The fast-paced RAHI II Next Step course will begin after orientation on June 2. Students may not start RAHI-II 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.

成本

所有费用（大约$6,500+每人学生RAHI-II Next Step）包括旅行，书籍，用品，房间，学费，板，和每周的食宿都是通过该课程提供的和免费给学生接受课程的学生。