



Jurassic Genetics 2010:

North Slope Edition

August 1st-15th 2010

Alaska BioPREP presents Jurassic Genetics 2010

- A two week summer residential program located at Ilisagvik College in Barrow
- Work in a research lab, learn genetics and molecular biology
- Work with BASC scientists and University of Alaska Fairbanks researchers
- Earn two university credits (UAF)
- Program dates: August 1st-15th, 2010
- Application deadline: April 30th, 2010

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. *Jurassic Genetics* gives you the confidence and skills necessary for undergraduate molecular biology research while you are still in high school, rather than waiting until you are a junior or senior in college.

You will start with basic DNA structure and design and work up to DNA extraction, gel electrophoresis, polymerase chain reactions, and cloning. *Jurassic Genetics* will also teach you 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 right away as you work alongside BASC scientists and University of Alaska Fairbanks graduate student mentors. You will become a part of the lab team, taking part in the discoveries as they happen.

Curriculum:

UAF courses are offered for full university credit (2 credits). Completion of BioPREP's *Jurassic Genetics* course will introduce students to the skills necessary for undergraduate research or work in a molecular biology research lab. *Jurassic Genetics* includes scientific writing, lab math and molecular biology theory and practice. Students will also learn how their newfound laboratory skills can be applied in a scientific or health career. Course work load is substantial, but the small class size and graduate student mentor provide *Jurassic Genetics* a safety net to give individual help and encouragement to those who may struggle from time to time.

To apply:

Email Amanda Meyer at Bio.PREP@uaf.edu for the *Jurassic Genetics* application. You will be notified by May 15th of the decision. Not everyone is accepted. To be successful you should:

- Be interested in earning a college degree
- Have a cumulative GPA of at least 3.0
- Finished at least your freshman year of high school
- Be 18 or younger on August 1, 2010
- Read at or above grade level
- Have taken a previous chemistry, biology or genetics class
- Commit to full attendance at *Jurassic Genetics*
- Be curious and ready to stretch your mind!

