QUEST & CONNECT-ED are designed to enhance teachers' content knowledge and skills for inquiry based teaching through hands-on experiments and discussion.

QUEST participants experiment while discussing pedagogy and the underlying content at an adult level with colleagues and the faculty. Teachers work in small, informal groups.

"I am totally re-energized and filled with some wonderful ideas for teaching!"

CONNECT-ED is centered on the **K-12** "big ideas" identified in national and state science standards. The *Atlas of Science Literacy* (AAAS 2001) and the New Jersey Core Content Curriculum Standards are important tools in the creation of Big Idea Modules. **Participants in CE can earn graduate credits if they enroll in the corresponding Rider University course. For more information contact browne@rider.edu.**

QUEST & CONNECT-ED meet from 8:30 am to 3:30 pm Monday through Friday. **Teachers receive an \$800 stipend for attending the two-week summer program or \$400 for attending one week.** Teachers may attend one or both weeks.

Participants also receive teaching materials and will earn 30 professional development credit hours per week.

QUEST & CONNECT-ED

are accepting applications for their 2012 programs.

Teachers may attend one or both weeks. For two weeks: Your district pays \$1,300, which includes your stipend of \$800, and a \$500 program fee. For one week: Your district pays \$650, which includes your stipend of \$400, and a \$250 program fee.

To apply fill out the online application at: http://teacherprep.reuniontechnologies.com/ dynamic.asp?id=quest_and follow instructions.

Application Deadline: April 2, 2012

Please complete your online application as soon as possible. Due to limited space, we may not be able to accept all teachers who apply. You will receive confirmation in May.

Dr. Anne Catena, *QUEST* Administrator Gina Mastro, *QUEST* Manager Program in Teacher Preparation 41 William Street Princeton University Princeton, NJ 08540

acatena@princeton.edu, mastro@princeton.edu 609-258-2536

QUEST is a collaboration of the Program in Teacher Preparation, the **Cooperative Institute for Climate Science** at Princeton University and Earthwatch.

CONNECT-ED Phase III is supported by Bristol-Myers Squibb Company, The Martinson Family Foundation, and 3M, as well as by the Consortium's 13 district/independent school partners, Rider University, and Princeton University.





QUEST & CONNECT-ED

QUEST will partner with Earthwatch in a field based program July 16-20th.



A summer institute in science & math for teachers of grades K — 12 July 9 - July 20, 2012

http://teacherprep.reuniontechnologies.co m/dynamic.asp?id=quest

Session for grades K-12 teachers

• <u>Week of July 9-13,2012</u> •

CONNECT-ED

A Journey through Space and Time

Join us on a journey through space and time and discover how scientists construct models of the Universe. We will analyze a variety of astronomical data from our Solar System and beyond. We will use math as a tool to construct, test, and evaluate models of the Universe and explore their connections. Lessons are aligned with the revised New Jersey Science Standards and the National Framework for Science Education. With lead scientist Dr. Wil van der Veen, Raritan Valley Community College.



The CONNECT-ED session will take place at Rider University.

We encourage elementary, middle and high school teachers to register for CONNECT-ED. The intent of CONNECT-ED is to examine how students' understanding and knowledge build throughout elementary, middle and high school. CONNECT-ED is centered on the **K-12** "big ideas" identified in national and state science standards. You will learn both content and inquiry based pedagogy.

"It's an excellent way to recharge."

Session for grades K-12 teachers

• <u>Week of July 16-20, 2012</u> •

Earthwatch: Tagging the Terrapins

In this field-based program teachers will help capture, tag, and track terrapins in their rich estuary environment. By drawing upon theory and first principles, teachers will design and carry out a study that assesses how terrapins balance risk of predation on eggs with physical factors that enhance their development when choosing nesting habitats. Tradeoffs pose a universal challenge to animals, and teachers will come away from this field course with an awareness of how biologists frame questions and design experiments to unravel the ways animals solve such problems.

The program is lead by Dr. Hal Avery, Drexel University and his research team. See <u>http://teacherprep.reuniontechnologies.com/dyn</u> amic.asp?id=earthwatch.

Participants must reside on the Earthwatch campus in Waretown, New Jersey from Monday to Thursday, July 16-19, 2012 and will return home on Thursday afternoon. The final day of the program, Friday, July 20th, 2012 will be held on the Princeton University campus.

"These experiences help you take your own knowledge to other levels."



Session for grades 3-8 teachers ONLY

• <u>Week of July 16-20, 2012</u> •

Weather and Climate

Explore the fundamentals of weather and climate through hands-on activities and demonstrations. Topics will include air pressure, temperature, seasons, the greenhouse effect, humidity, clouds, wind, the Coriolis effect, storms, and colors in the sky. Specific topics and activities will depend upon participants' backgrounds and interests. At Princeton University with Dr. Steve Carson, John Witherspoon MS and formerly with the Geophysical Fluid Dynamics Laboratory.



"Without a doubt, QUEST is the best professional development I've experienced as a science teacher because it challenges my adult understanding of concepts and allows me to determine how I can best take this back and apply it to my classroom activities."