GRiH\(^2\) Summer Program*  
June 1 – August 22, 2011

The University of Texas at Austin Graduate Research in High School Hands (GRiH\(^2\)) Program provides students the opportunity to work alongside graduate students and learn both hands on skills for developing cutting edge technology in the field of chemical engineering as well as experiencing the academic rigor found in a college classroom setting. This is a paid internship program providing a onetime stipend of $1150 for work completed during the summer. Overall, this program intends to engage students, develop interest in college and graduate school studies while keeping the course work fun and exciting. **Only students 16 or older and enrolled at Akins High School for the 2011 – 2012 school year are eligible.**

The program will be accepting 11\(^{th}\) and 12\(^{th}\) graders from Akins High School STEM or New Tech Academies. Students will be working in laboratory settings focused on developing materials for bioapplications, specifically for treating or developing new therapeutic techniques for treating traditional illnesses such as cancer. Students will learn polymer synthesis and develop an understanding of laboratory instruments and techniques.

In addition, students will have the opportunity to here mini-lectures from graduate students informing them of the general knowledge and practicality of polymers and their use in the biological applications. Students will also get the opportunity to present their work to his or her colleagues they worked with over the summer.

The GRiH\(^2\) program will take place between June and August 22, 2011 and last for a duration of 120 hours. Students will work for 4 consecutive weeks, 5 days a week, for 6 hrs a day. At the beginning of each week, a short lecture (30-45 min) will be presented to the student that is pertinent to his overall summer experience. Lectures will primarily focus on formal learning of polymer, polymer systems, and their uses in bioapplications. These lectures may also be used to present and introduce specialized equipment used in the lab that requires important instructions and safety measures. Students will be expected to pass small tests or quizzes related to both laboratory techniques as well as formal book work. At end of the 4 weeks, the student will give a small presentation on what he or she has accomplished and learned over the duration of the GRiH\(^2\) program.
Parent or Guardian Information

Applicants should be competent in science high school courses with a B or better average in their academic courses, especially in math and science.

Only students 16 or older and enrolled at Akins High School for the 2011 – 2012 school year are eligible.

The program hours are normally from 8:00a.m. - 2:00p.m. every weekday for 4 consecutive weeks (120 hours total). This time will be split between laboratory and classroom environments.

All students will be given assignments and examinations appropriate to the material presented in the classroom and laboratory. Participants are expected to do the work required and to maintain a minimum average of 80% in the GRiH\textsuperscript{2} program.

Unexcused absences from the program or acts of misconduct may result in immediate dismissal from the program.

Students with two or more unexcused absences may be asked to leave the program after individual consultation. Students are expected to abide by UT and GRiH\textsuperscript{2} rules given by the program staff.

All program functions are held on the UT campus. Program staff is available for supervised research and individual consultations. There is no fee to participate in the GRiH\textsuperscript{2} Academy.

Since students are paid a stipend to participate in the GRiH\textsuperscript{2} program, there will be no food or transportation provided for the students. The stipend is intended to help offset these costs.

Courses

Laboratory setting
A. Polymer Synthesis and purification
B. Loading and release of therapeutic compounds
C. Use of specialized equipment

Classroom setting
A. Introduction to polymers
B. Polymer Characterization
C. Polymers in Medicine
D. Polymers in Industry
Important Dates

1. Application deadline – May 13, 2011 or until all remaining seats are filled.
2. Interviews may be required to determine admittance to the program.
3. Successful candidates will be notified of acceptance by May 22, 2011.

Application Instructions

1. The completed Participant Application form.
2. Two recommendation forms: one from your science teacher and assistant principal
3. A 100-300 word essay stating why you want to participate in the program.
4. High school transcript.
5. Only students 16 or older and enrolled at Akins High School for the 2011 – 2012 school year are eligible.

Applications may be obtained by visiting our website – http://www.che.utexas.edu/research/biomat/labnews/index.htm
or by contacting:

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Or

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