University of Washington Engineered Biomaterials
Science Teacher Institute (STI) Application

UWEB’s STI is a National Science Foundation funded summer professional development opportunity for middle school and high school science teachers interested in increasing their knowledge of Biomaterials and Bioengineering, and providing cutting-edge, inquiry-based science materials for their students.

STI consists of three different three-day institutes. Ten teachers will be accepted to attend each institute. Teachers must choose the topic that best fits their curricular needs and interest. All institutes include training in engineered biomaterials and hands-on, inquiry based learning. Upon completion of an institute, teachers receive:

* two UW credits
* a $300 stipend
* access to curriculum and kit materials to use in their classrooms.

The three institutes are:

**Build Me Up, Scotty! July 25, 2006 - July 27, 2006:**
Cells make tissues, tissues make organs, and organs make systems. This institute looks at the concept of levels of organization. The scientifically complex topic of tissue engineering will be covered. Stem cell research will be addressed in the ethics component of this unit.

**Stick This In Your Ear! August 1, 2006 – August 3, 2006:**
To hear or not to hear? This unit addresses the science and ethics behind cochlear implants. “Stick This in Your Ear” may be used to supplement studies on sound, electricity, or hearing.

**What’s Growing On? August 8, 2006 – August 10, 2006:**
Integrates mathematics and science while examining growth through the kingdoms. Participants will learn how growth patterns relate to fractals and use quail eggs to illustrate the development of the circulatory system. An ethics component guides students through issues involved in using animals in biomedical research.

Please submit completed applications to:

Catherine Grubin, Ph.D.
University of Washington
Box 355061
Seattle, WA 98195-5061

Phone: (206) 221-5823
FAX: (206) 616-9763
Email: grubin@u.washington.edu
DEADLINE: May 22, 2006
Notifications of acceptance/denial will be mailed by May 29, 2006.

Science Teacher Institute Application

Name ________________________________________________________________

Home Address ________________________________________________________________
Street     City    Zip Code

Home Phone (____) ______-____________

School Name ________________________________________________________________

District ________________________________________________________________

School Address ________________________________________________________________
Street     City    Zip Code

School Phone (____) ______-________   School Fax (____) _____-_________

E-mail address ____________________________________

Is E-mail a good way to reach you? _____ YES     _____ NO

Which institute are you interested in attending? Please mark your first choice.

   _____ Build Me Up, Scotty!
   _____ Stick This In Your Ear!
   _____ What’s Growing On?

If I cannot get into my first choice, my second choice is ____________________________.

Education Background

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<th>INSTITUTION</th>
<th>DATES ENROLLED</th>
<th>AREA OF STUDY</th>
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**Teaching experience** – Please list most current position first.

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<th>DATES</th>
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<th>SUBJECT(S) TAUGHT</th>
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**Student Population** - Please list the percentage of your school population for each category.

- _____ African American
- _____ Asian American
- _____ Caucasian
- _____ Hispanic/Latino
- _____ Free or Reduced Lunch
- _____ Male
- _____ Female

**Professional Development** – Please list science-related professional development activities you have participated in over the past three years.

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<th>COURSE/PROGRAM</th>
<th>INSTITUTION/SPONSOR</th>
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Please attach a brief statement that explains why you would like to participate in the UWEB STI program and what you hope to gain from the experience.

If accepted, I agree to attend all three days of the institute, and use the UWEB materials in my classroom during the 2006-2007 school year.

Signature__________________________________________ Date_____________
Dear Principal,

_____________________ is applying to participate in a three-day summer institute sponsored by the University of Washington Engineered Biomaterials (UWEB). By participating in this program teachers are provided with:

• Opportunities to learn concepts, processes, and techniques used in science and engineering in general, and biomaterials in particular.

• Opportunities to collaborate with UWEB scientists and staff, past MSSTI participants, and other Puget Sound science teachers.

• On going access to biomaterials kits for classroom use as well as UWEB resources and technical support.

• Instructional materials that apply an inquiry approach to teaching integrated science concepts and are aligned with the Washington State Essential Academic Learning

• A stipend and University of Washington continuing education credits.

Please fill in the requested information, sign, and return this form to the teacher listed above. This form is to be included with the completed application. For more information, please contact Dr. Catherine Grubin at (206) 221-5823.

Your signature below confirms that the teacher listed above will be teaching science at __________________________ during the 2006-2007 school year. Your signature also assures your commitment to the teacher using the UWEB curriculum kit materials with their students.

_________________________________  ________________________________
Principal Name  (Please print)   Principal Signature

_________________________________
Date