



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

September 8, 2006

ALL AGREEMENT STATES, NEW JERSEY, PENNSYLVANIA, VIRGINIA

**ACCEPTANCE TO THE BRACHYTHERAPY, GAMMA KNIFE AND EMERGING  
TECHNOLOGIES COURSE (H-313) (STP-06-086)**

Enclosure (1) is the list of students from the States selected to attend the October 16-20, 2006 Brachytherapy, Gamma Knife and Emerging Technologies Course (H-313). Please provide the list of students and the travel instructions, Enclosure (2), to each individual from your program that is on the list. States with students attending this course have agreed to pay travel expenses and where designated the tuition. To cover the tuition expense, each State should submit a purchase order or equivalent document, to the U.S. Nuclear Regulatory Commission (NRC), to the following address:

U.S. Nuclear Regulatory Commission  
Office of the Chief Financial Officer  
Attn: Leah P. Tremper  
Mail Stop T-9E10  
Washington, DC 20555

The NRC will, in turn, issue you a bill (invoice). If for any reason your attendee is unable to attend, please submit to us a written purchase order, or equivalent to cancel, prior to the starting date of the course.

We ask that you inform us of any cancellations 30 days prior to the course starting date. This will assist us in ensuring that States with candidates on waiting lists have an opportunity to fill vacated slots that may open up after our course acceptance letters have been sent to you.

If you have any questions regarding this correspondence, please contact me or the individual named below.

POINT OF CONTACT:	Brenda G. Usilton	INTERNET:	BGU@NRC.GOV
TELEPHONE	(301) 415-2348	FAX	(301) 415-3502

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Dennis K. Rathbun, Deputy Director  
Office of State and Tribal Programs

Enclosures:  
As stated

Distribution:

**SISP Review Complete**

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OFFICE	STP	<input checked="" type="checkbox"/>	STP:DD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
NAME	BGUsilton:mfr		DKRathbun					
DATE	09/08/06		09/08/06					

**OFFICIAL RECORD COPY**

Brachytherapy, Gamma Knife and Emerging Technologies Course (H-313)  
 OCTOBER 16-20, 2006  
 HOUSTON, TX

STATE	PARTICIPANT(S)	PAYING TUITION/ SPACE AVAILABLE
<b>CALIFORNIA</b> Radiologic Health Branch Division of Food, Drug & Radiation Safety California Department of Health Services P.O. Box 997414 Sacramento, CA 95899-7414	Hugh Alsworth Thomas Pomaes	1. Paying Tuition 2. Paying Tuition
<b>LOUISIANA</b> Permits Division Office of Environmental Services P. O. Box 4313 Baton Rouge, LA 70821-4313	Karen Ratcliff	1. Paying Tuition
<b>MINNESOTA</b> Division of Environmental Health Minnesota Department of Health 121 E. Seventh Place, Suite 220 P.O. Box 64975 St. Paul, MN 55164-0975	Sherrie Flaherty Brandon Juran	1. Paying Tuition 2. Paying Tuition
<b>NEVADA</b> Bureau of Health Protection Services, Nevada State Health Division 1179 Fairview Drive, Suite 201 Carson City, NV. 89701-5405	Wayne Yates	1. Paying Tuition
<b>NEW MEXICO</b> Radiation Protection Program New Mexico Department of Environment P.O. Box 26110 Santa Fe, NM 87502-0110	Daniela Bowman	1. Paying Tuition
<b>OKLAHOMA</b> Radiation Management Section Oklahoma Department of Environmental Quality P.O. Box 1677 Oklahoma City, OK 73101-1677	John Flynn	1. Paying Tuition
<b>OREGON</b> Oregon Health Services Department of Human Services 800 NE Oregon Street, Suite 260 Portland, OR 97232-2162	Justin Spence	1. Paying Tuition
<b>PENNSYLVANIA</b> Bureau of Radiation Protection Pennsylvania Department of Environmental Protection Rachel Carson State Office Building P.O. Box 8469 Harrisburg, PA 17105-8469	Scott Wilson	1. Space Available
<b>TEXAS</b> Texas Department of Health 1100 West 49th Street Austin, TX 78756-3189	Abra Paul Sanford	1. Paying Tuition
<b>WASHINGTON</b> Office of Radiation Protection Washington Department of Health P.O. Box 47827 Olympia, WA 98504-7827	Kristen Schwab Pamela Walsh	1. Paying Tuition 2. Paying Tuition

## INSTRUCTIONS TO STUDENTS

**ACCEPTANCE:** This is to advise you that those individuals in Enclosure (1) have been accepted for participation in the training course (H-313), "Brachytherapy, Gamma Knife and Emerging Technologies Course" which is scheduled to be presented October 16-20, 2006, at the Advanced Health Education Center (AHEC), 8502 Tybor Street, Houston, Texas 77074, Telephone: (713) 772-0157 or 1-800-239-1361.

**COURSE:** The course will be conducted beginning at 8:00 a.m. and ending at 5:00 p.m. each day except for Friday, October 16, which will end at 3:30 p.m. **Please refer to AHEC's Web page at URL: <http://www.AHECOnline.com> for hotel information and transportation between the hotel and the AHEC. Click on General Information.** A tentative outline for the course (Enclosure 3) is attached. Cellular phones and similar devices with audible capability should be disabled while classes are in session. Normal office/business attire is appropriate for students attending TTC courses.

**LODGING:** Students should plan to arrive on Sunday, October 15, 2006 and depart on Friday, October 20, 2006. Some hotels offer transportation to and from the AHEC. Participants must make their own lodging and travel arrangements. Individuals should request a State or government employee rate at the hotel.

### **Ground Transportation from Airports to Houston Hotels**

Ground transportation from airports to Houston hotels, Airport Express, services ground transportation to and from both Intercontinental and Hobby airports. Buses depart every 30 minutes for designated terminals and will take you to the Galleria where you should call a cab to deliver you to your hotel. Call 713-523-5695 or 713-523-8888 for Airport Express Information.

Cab fare is approximately \$40 from Hobby Airport and \$60 from Intercontinental to hotels in your area. Bus fare is \$10 - \$20. The Airport Express ticket agent is located in the baggage claim area. Call 713-236-1111 for Yellow Cab Company. If you call a cab service, establish the rates prior to engaging the taxi.

### **Parking**

Parking in Houston is on surface lots and is free of charge.

### **Hotels within vicinity of training:**

Wingate Inn - 11050 Southwest Freeway - 281-568-6969 or 1-800-228-1000

Approximately 1 mile away from the AHEC facility. The Wingate Inn also offers shuttle service to and from the AHEC facility and complimentary Continental breakfast.

Country Inn & Suites - 11230 South West Freeway - 281-575-8283

Hilton Southwest - 6870 Southwest Freeway - 713-977-7911

The Hilton Southwest is an excellent hotel. They will provide transportation at no charge to AHEC. They will also take you to the mall or to other eating destinations within close proximity.

Holiday Inn - 11160 Southwest Freeway - 800-230-8730

Embassy Suites - 9090 Southwest Freeway - 713-995-0123

The Embassy Suites offers shuttle service to and from the AHEC facility.

Proposed Outline

Title*	Time** (hr)	Comments
<p><i>Introduction</i></p> <p>Review of course of objectives and schedule Review of Frequently asked questions</p> <ul style="list-style-type: none"> <li>&lt; General information on cancer</li> <li>&lt; Cancer treatment modalities</li> <li>&lt; Sequence of events leading to cancer treatment</li> <li>&lt; Radiation oncology treatment team</li> <li>&lt; Non-cancer treatments</li> </ul>	0.33	
<p><i>Principles of Radiobiology</i></p> <ul style="list-style-type: none"> <li>&lt; Basic radiobiology information - general concepts               <ul style="list-style-type: none"> <li>• Effects of irradiation on cells and DNA</li> <li>• Linear energy transfer (LET)</li> <li>• Cell cycle</li> </ul> </li> </ul>	0.5	
<p><i>Overview of Radiation Therapy and Associated Terminology</i></p> <ul style="list-style-type: none"> <li>&lt; Overview of radiation therapy</li> <li>&lt; Brief introduction of modalities and basic terminology               <ul style="list-style-type: none"> <li>• Teletherapy (Historical perspective)</li> <li>• Brachytherapy (including emerging technologies)</li> <li>• Stereotactic radiosurgery</li> </ul> </li> <li>&lt; Accelerators discussion, including historic facts, basic uses, and function</li> </ul>	1	
<p><i>Brachytherapy - History and Applications</i></p> <ul style="list-style-type: none"> <li>&lt; Historical aspects of brachytherapy</li> <li>&lt; Applications</li> <li>&lt; Manual versus remote afterloader</li> <li>&lt; Permanent versus temporary implants</li> <li>&lt; Sr-90 eye applicator, including guidance on its calibration</li> <li>&lt; gliasite and microspheres</li> </ul>	1.25	

Title*	Time** (hr)	Comments
<p><i>Principles of Brachytherapy</i></p> <ul style="list-style-type: none"> <li>&lt; Types of radioactive sources used in brachytherapy</li> <li>&lt; Dosage systems</li> <li>&lt; Treatment planning</li> <li>&lt; Source activity quantification (e.g., terminology [air kerma strength, apparent activity], vendor and licensee calibration methods)*</li> </ul>	1.25	<p>* this topic may be defined in this chapter and assigned to a medical physicist for a more in depth discussion later in the course.</p>
<p><i>Radiation Safety Concerns in Brachytherapy</i></p> <ul style="list-style-type: none"> <li>&lt; Posting</li> <li>&lt; Safety instructions</li> <li>&lt; Outpatient treatments and precautions</li> <li>&lt; Source inventory control</li> <li>&lt; Patient release criteria</li> <li>&lt; Recent events and enforcement cases</li> </ul>	1	<p>Include all information currently presented in course. Applicable regulations: 35.67, 35.404, 35.406, 35.410, 35.415. Include source inventory control (source security/loss of control). Include Table 1 of IAEA Code of Conduct (highlight quantities of concern)</p> <p>emphasize that an important part of radiation safety is protection of the patient for therapy uses and that is the focus of the written directive &amp; program to assure administration is given IAW written directive which will be discussed later</p>
<p><i>Overview of Quality Control Concepts</i></p> <ul style="list-style-type: none"> <li>&lt; Brief introduction to quality control in radiation therapy treatment</li> </ul>	0.5	<p>Applicability to brachytherapy and gamma knife.</p>
<p><i>Written Directives (including requirements and examples)</i> (glisite, microspheres)</p>	1	<p>Eliminate clinical management of the patient. Only include written directives and their applicability to gamma knife, HDR, and other brachytherapy. Applicable regulations: 35.40, 35.41</p> <p>focus on assuring administration is IAW written directive and QC program exists to assure this</p>