

Therapeutic Radiologic Physics as shown in the attached. The ABR would appreciate the NRC's response confirming that this action is satisfactory or suggestion of an alternate action that would satisfy the intent.

We appreciate your advance review of this material and guidance as to how to proceed if different from the above.

I look forward to hearing from you. As soon as these last issues are resolved, we will send the final response including the printout of relevant web site pages for Radiologic Physics.

Thank you,

Stephen R. Thomas, Ph.D.

At 03:32 PM 2/7/2006, Cynthia Flannery wrote:

>Dr. Thomas,

>

>To clarify NRC's request for "an ABR-supplied copy of referenced ABR web site information," the action required by ABR is printing out the web page that contains the referenced information and including it as an enclosure in your formal response memo/letter to NRC. It does not need to be signed or dated (although the printout will most likely have the date and the web site in the footer).

>

>Because the information provided on a web site can be changed at any time, a printout of ABR's web site (supplied by ABR) serves as documentation to the NRC of ABR's current communication to the candidates of ABR's current requirements for their candidates to get board certified.

>

>I hope this adequately describes what NRC is requesting. If not, please don't hesitate to contact me.

>

>Cindy

>

>Cindy Flannery, CHP, Team Leader
>Medical Radiation Safety Team
>Materials Safety and Inspection Branch
>Division of Industrial and Medical Nuclear Safety
>Office of Nuclear Material Safety and Safeguards
>U.S. Nuclear Regulatory Commission
>Mail Stop T8-F3
>Washington, DC 20555
>Phone: 301-415-0223
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>

>

> >>> "Stephen R. Thomas" <thomassr@uc.edu> 02/06/06 6:54 PM >>>

>Dear Ms. Flannery:

>

>We are finalizing our response to the points raised in your letter of 11/21/2005 (copied below) regarding the Radiologic Physics section. We would appreciate clarification as to the meaning of "An ABR-supplied copy

>of referenced ABR web site information." Is this a dated, signed print out
>of the relevant text from the ABR web site? Or is some other
>action/documentation required on our part?

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>We appreciate your clarification of this point.

>
>Thank you,

>
>Stephen R. Thomas, Ph.D.

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>At 04:16 PM 11/21/2005, you wrote:

> >Dear Dr. Hattery:

> >
> >I am writing in response to your October 14, 2005 letters in which you
> >were seeking recognition of the American Board of Radiology's (ABR)
> >Diagnostic Radiology, Radiation Oncology and Radiologic Physics
> >certification processes by the U.S. Nuclear Regulatory Commission (NRC).
> >There are several statements in the letters which preclude recognition of
> >ABR certification processes without further input from the ABR. The
> >issues that require attention are listed and explained below.

> >
> >Diagnostic Radiology:

> >1. The ABR-provided responses to no. 1 are OK, but it does not
> >comport with information posted on the ABR web site. The response
> >indicates that candidates seeking certification for diagnostic radiology
> >must meet the specific training and experience requirements described in
> >10 CFR 35.290(c)(1)(i) and (c)(1)(ii) and 10 CFR 35.392(c)(1) and (c)(2),
> >but the web site information on training and experience does not list the
> >required topics. If the provided answer is correct, the web site
> >information needs to be revised to include that the residency program must
> >include the topics listed in 10 CFR 35.290(c)(1)(i) and (c)(1)(ii) and 10
> >CFR 35.392(c)(1) and (c)(2).

> > An ABR-supplied copy of referenced ABR web site information is
> > needed.

> >
> >2. The ABR web site indicates that the residency must include a 16
> >week rotation in clinical nuclear medicine and that didactic instruction
> >will be required to cover the nuclear medicine topics cited in sections
> >35.290 (imaging and localization studies) and 35.392 (oral administration
> >of I-131 in quantities less than or equal to 33mCi). The web site further
> >states that this instruction can be given in classroom/laboratory sessions
> >during the clinical rotations in nuclear medicine, or at other times
> >during the residency. First, a 16 week rotation in clinical nuclear
> >medicine may not provide 700 hours of training and experience. Second, it
> >appears by the way the web site is stated, that a significant part of the
> >700 hours is spent in clinical areas not directly related to basic
> >radionuclide handling techniques and radiation safety (e.g.,
> >interpretation of the films and images). Considering the fact that
> >residents may spend a significant portion of this rotation on subjects not
> >related to basic radionuclide handling techniques and radiation safety
> >applicable to the topics listed in 10 CFR 35.290(c)(1)(i) and (c)(1)(ii)
> >and 10 CFR 35.392(c)(1) and (c)(2), please clarify how the ABR can ensure
> >that all ABR candidates meet the 700 hours of training and work experience
> >in radiation safety in nuclear medicine.

> >

> >3. The ABR-provided responses to the no. 2 are OK, but it does not
> >comport with information posted on the ABR web site. The response
> >indicates that candidates seeking certification for diagnostic radiology
> >must obtain their work experience under the supervision of an authorized
> >user who meets the requirements in 10 CFR 35.290(c)(1)(ii) and 10 CFR
> >35.392(c)(2), but the web site information does not mention this
> >requirement. If the provided answer is correct, the web site information
> >needs to be revised.

> > Here, too, an ABR-supplied copy of referenced ABR web site
> > information is needed.

> >

> >4. The ABR website indicates that ABR accepts candidates from
> >Canadian residency programs. Please provide the method that ABR uses to
> >distinguish candidates that meet the requirements in 10 CFR
> >35.290(c)(1)(ii) and 10 CFR 35.392(c)(2) (i.e., obtained work experience
> >under the supervision of an authorized user) from those candidates who do
> >not (i.e., obtained work experience in Canada).

> >

> >5. The ABR-provided responses to the no. 3 are OK, but it does not
> >comport with information posted on the ABR web site. The response
> >indicates that the certification exam in diagnostic radiology includes
> >assessment of knowledge and competence in radiation safety, radionuclide
> >handling and quality control, but the web site information on examinations
> >does not explicitly list these anywhere. If the provided answer is
> >correct, the web site information needs to be revised.

> > Here, too, an ABR-supplied copy of referenced ABR web site
> > information is needed.

> >

> >

> >Radiation Oncology:

> >1. The ABR-provided responses to nos. 1 and 2 are OK.

> >

> >2. For no. 3, the ABR-provided response indicates that candidates
> >seeking certification for radiation oncology must meet the specific
> >training and experience requirements described in 10 CFR 35.390(b)(1)(i)
> >through 10 CFR 35.390(b)(1)(ii)(E) for use of unsealed byproduct material
> >for which a written directive is required, but the web site information on
> >training and experience does not mention the minimum number of hours or
> >the required topics. If the provided answer is correct, the web site
> >information needs to be revised to include that the residency program must
> >include the minimum number of hours of training and experience (i.e., 700
> >hours) in the topics listed in 10 CFR 35.390(b)(1)(i)(A) through 10 CFR
> >35.390(b)(1)(ii)(E).

> > An ABR-supplied copy of referenced ABR web site information is
> > needed.

> >

> >3. For no. 4, the ABR-provided response indicates that candidates
> >seeking certification for radiation oncology must obtain their work
> >experience under the supervision of an authorized user who meets the
> >requirements in 10 CFR 35.390(b)(1)(ii), but the web site information does
> >not mention this requirement. If the provided answer is correct, the web
> >site information needs to be revised.

> > Here, too, an ABR-supplied copy of referenced ABR web site
> > information is needed.

> >

> >4. The ABR website indicates that ABR accepts candidates from

> >Canadian residency programs. Please clarify how ABR will distinguish all
> >of the candidates that meet the requirements in 10 CFR 35.390(b)(1)(ii)
> >(i.e., obtained work experience under the supervision of an authorized
> >user) from those candidates who do not (i.e., obtained work experience in
> >Canada).

> >
> >5. For no. 5, the ABR-provided response indicates that the
> >certification examination in Radiation Oncology assesses knowledge and
> >competence in the clinical use of unsealed byproduct material for which a
> >written directive is required. The ABR-provided response to this question
> >is OK, but an ABR-supplied copy of referenced ABR web site information is
> >needed that includes the required exam topics (i.e., radiation safety,
> >radionuclide handling, quality assurance, treatment planning, and clinical
> >use of the following: unsealed byproduct material for which a written
> >directive is required; manual brachytherapy; stereotactic radiosurgery;
> >remote afterloaders; and external beam therapy). Of the listed required
> >exam topics, only radiation safety, radionuclide handling, and quality
> >assurance could be found on the website.

> >

> >

> >Radiologic Physics:

> >1. The ABR-provided responses to 4 of your 7 questions are OK. All that
> >is needed for nos. 1, 2, 3, & 6 is an ABR-supplied copy of referenced ABR
> >web site information.

> >

> >2. The ABR-provided responses to the other 3 of your 7 questions are OK,
> >but do not comport with information posted on the ABR web site.

> > a) For nos. 4 & 5, the ABR-provided response indicates that the
> >preceptor must be an ABR-certified medical physicist, but the web site
> >information permits the preceptor to be an ABR-certified physician. If
> >the provided answer is correct, the web site information needs to be
> >revised.

> > b) For no. 7, the ABR-provided response indicates that the
> >certification exam in Therapeutic Radiologic Physics includes
> >stereotactic radiosurgery, but the web site information on examinations
> >does not mention stereotactic radiosurgery anywhere. If the provided
> >answer is correct, the web site information needs to be revised.

> > Here, too, an ABR-supplied copy of referenced ABR web site
> >information is needed.

> >

> >In summary, with a few small adjustments to web-posted information, to
> >comport with answers provided, and provision to NRC of the referenced
> >web-posted information, the ABR application for its radiological physics
> >certification program appears to be approvable.

> >

> >Review of ABR's application for recognition will continue upon receipt of
> >ABR's official reply to the issues needing attention that are listed and
> >explained above.

> >

> >Communications from the ABR associated with applying for recognition of
> >one or more of its certification processes should continue to be
> >addressed to:

> >

> > U.S. Nuclear Regulatory Commission
> > ATTN: Mr. Thomas H. Essig, Chief, Materials Safety
> > and Inspection Branch (MS T8F3)

>> 11545 Rockville Pike
>> Rockville, MD 20852
>>
>>For further information or for questions, please contact me at (301)
>>415-0223, cmf@nrc.gov.
>>
>>Respectfully,
>>Cindy Flannery

Stephen R. Thomas, PhD steve.thomas@uc.edu
Professor of Radiology (513) 558-5476 (voice)
Director, Medical Physics (513) 558-0300 (fax)
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Cincinnati, Ohio 45267-0579

CC: <rattery@TheABR.ORG>, <paliwal@humonc.wisc.edu>, <morin@mayo.edu>

Mail Envelope Properties (43F60749.781 : 21 : 18305)

Subject: Re: Response to Oct. 14 letter - Clarification
Creation Date: 2/17/06 12:18PM
From: "Stephen R. Thomas" <thomassr@uc.edu>

Created By: thomassr@uc.edu

Recipients

nrc.gov

OWGWPO02.HQGWDO01

CMF (Cynthia Flannery)

mayo.edu

morin CC

humonc.wisc.edu

paliwal CC

TheABR.ORG

rhattry CC

Post Office

OWGWPO02.HQGWDO01

Route

nrc.gov

mayo.edu

humonc.wisc.edu

TheABR.ORG

Files	Size	Date & Time
MESSAGE	14853	02/17/06 12:18PM
TEXT.htm	17945	
RP ABR Followup 02-17-2006.doc		34304
Mime.822	82001	

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

Recognition of The ABR Radiologic Physics Certification Process by the NRC

Follow-up Considerations

Prepared by: Stephen R. Thomas, Ph.D.

Date: February 17, 2006

A. Issue related to ABR Certified Radiologic Physicist as the Required Preceptor

NRC Concern: From C. Flannery (11/21/2005): The ABR-provided response [for questions #4 and #5] indicates that the preceptor must be an ABR-certified medical physicist, but the web site information permits the preceptor to be an ABR-certified physician. If the provided answer is correct, the web site information needs to be revised.

ABR Action: Clarify the situation. The preceptor must be an ABR-certified radiologic physicist [medical physicist] as stipulated in the asterisk statement in the website material below the table (see below). The requirement for providing references with the application from 2 individuals (ABR certified radiological physicist and physician) constitutes a distinct and separate function from that of the preceptor. The medical physicist providing the reference may or may not be the same individual as the preceptor. The reference may come from a medical physicist who is currently aware of the candidate's professional activities in the field but who may not have been involved in the actual training. The application form filled out by the candidate makes it clear that the training must have been acquired under the supervision of an ABR-certified radiologic physicist.

The ABR believes that the intent desired by the NRC is encompassed in the current wording/description provided within the Radiologic Physics Requirements section of the web site (printed below). However, if the NRC has suggestions that would further clarify this point, The ABR would be happy to review them for possible inclusion.

ABR Radiologic Physics web site material (copied 02/17/2006)

To qualify for any Part 2 exam:

- You must have passed the Part 1 exams.
- You must have had at least 3 years (36 months) of full-time equivalent active association with an approved department or division of the area(s) in which certification is sought. This requirement must be satisfied by June 30 of the year in which the Part 2 exam is to be taken. This credit can be acquired through:

Activity	Possible Credit
Graduate study in a medical physics program which includes a clinical component *	Up to 12 months
Master's level program that includes a clinical component *	Up to 6 months
Doctoral level program that includes a clinical component *	Up to 12 months
Postgraduate clinical medical physics internship or residence *	Full-time credit
Postdoctoral clinical/research program * (Credit for clinical only, with preceptor's confirmation of hours spent in clinical duties)	Full-time credit
Your program may be arranged through a department other than radiology or radiation oncology, but the work you perform must be in the area(s) of radiologic physics in which you seek certification.	

* Your practical training and/or supervised experience in medical physics must be under the supervision/direction of an ABR-certified radiologic physicist.

No credit is given for experience gained as an undergraduate, nor for extracurricular experience gained before you completed your graduate degree.

You must include references with your application:

- o a physician holding ABR certification in an appropriate specialty or subspecialty
- o a physicist holding ABR certification in radiologic physics or in your specialty (Canadian physicists who seek certification by the ABR can use members and fellows of the Canadian College of Medical Physics as physicist references)

The name and professional title of each reference must be clearly stated on the application. All references must have personal knowledge of your experience, training, and ethical standing, and must certify that you are qualified to take the examination.

Stephen R. Thomas, Ph.D.
Date: February 17, 2006

B. Issue Related to Training in stereotactic radiosurgery

NRC Concern: From C. Flannery (11/21/2005): The ABR-provided response [for question #7] indicates that the certification exam in Therapeutic Radiologic Physics includes stereotactic radiosurgery, but the web site information on examinations does not mention stereotactic radiosurgery anywhere. If the provided answer is correct, the web site information needs to be revised.

ABR Action: The certification exam in Therapeutic Radiologic Physics definitely includes stereotactic radiosurgery as one of the areas encompassed. The ABR proposes to modify the web site by adding "Stereotactic Radiosurgery" in the Study Guide list of topics under Therapeutic Radiologic Physics as shown below. The ABR would appreciate the NRC's response confirming that this action is satisfactory or suggestion of an alternate action that would satisfy the intent.

ABR Radiologic Physics web site material (copied 02/17/2006)

Study Guides

Computer-based Examinations

Part 2

Therapeutic Radiologic Physics

Radiation sources and units

Measurements of radiation quantity and quality

Physical principles of radiation therapy, treatment planning and setup

Treatment simulation

Brachytherapy

Stereotactic radiosurgery [to be added]

Imaging applications to radiation therapy

Radiobiological principles of therapy

Dose calculations

Quality assurance

Radiation protection (including survey techniques and installation design)