



January 29, 2013

Nuclear Materials Licensing Branch
U.S. Nuclear Regulatory Commission, Region IV
1600 E. Lamar Blvd.
Arlington, TX 76011-4511

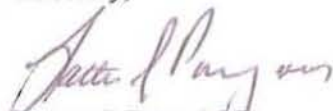
Subject: Amendment Request
NRC License No. 53-27797-01
Docket No. 030-036775

Dear License Reviewer:

We are requesting the addition of Hong Zhou, Ph.D. to our list of Authorized Medical Physicists for the High Dose Rate remote afterloader unit. We have attached attestation forms from each of his two preceptors.

If you require any additional information, please contact our Radiation Safety Officer, Ronald Frick at 808-373-7009.

Sincerely,


Laeton J. Pang, M.D.
Medical Director

Enclosures

PUBLIC

- ☐ Immediate Release
☒ Normal Release

NON-PUBLIC

- ☐ A.3 Sensitive-Security Related
☐ A.7 Sensitive Internal
☐ Other: _____

Reviewer: RITC Date: 2-13-2013

**AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION**
[10 CFR 35.51]APPROVED BY OMB: NO. 3150-0120
EXPIRES: (05/31/2015)

Name of Proposed Authorized Medical Physicist

Hong Zhou, Ph.D.

Requested Authorization(s)
(check all that apply)

☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

*Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ **1. Board Certification**

- Provide a copy of the board certification.
- Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought.
- Skip to and complete Part II Preceptor Attestation.

☐ **2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above**

- Go to the table in section 3.c. to document training for new device.
- Skip to and complete Part II Preceptor Attestation

☒ **3. Education, Training, and Experience for Proposed Authorized Medical Physicist**

- Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

Degree	Major Field
PhD	Physics
College or University	
University of Science and Technology of China, Hefei, China	

- Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

☐ Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of _____ who meets the requirements for an Authorized Medical Physicist.

AND

☐ Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of _____ who meets the requirements for an Authorized Medical Physicist.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used+	Dates of Training*	Dates of Work Experience*
Medical Physics	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13
Performing sealed source leak tests and inventories	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13
Performing decay corrections	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13
Performing full calibration and periodic spot checks of external beam treatment unit(s)	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)			
Performing full calibration and periodic spot checks of remote afterloading unit(s)	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)	The Cancer Center of Hawaii, NRC #53-27797-01	8/22/12 - 1/18/13	8/22/12 - 1/18/13

Supervising Individual**

License/Permit Number listing supervising individual as an
authorized Medical Physicist

Jundong Huang, PhD

The Cancer Center of Hawaii, NRC #53-27797-01

for the following types of use:

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

* Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Hands-on device operation	The Cancer Center of Hawaii, 8/22/12 - 1/18/13		
Safety procedures for the device use	The Cancer Center of Hawaii, 8/22/12 - 1/18/13		
Clinical use of the device	The Cancer Center of Hawaii, 8/22/12 - 1/18/13		
Treatment planning system operation	The Cancer Center of Hawaii, 8/22/12 - 1/18/13		

Supervising Individual

If training is provided by Supervising Medical Physicist, (If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)

Jundong Huang, PhD

License/Permit Number listing supervising individual as an authorized Medical Physicist

NRC #53-27797-01

for the following types of use:

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☐ Gamma stereotactic radiosurgery unit(s)

If Applicable:

Authorization Sought	Device	Training Provided By	Dates of Training
35.400 Ophthalmic Use of strontium-90			

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section

Check one of the following:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
Name of Proposed Authorized Medical Physicist
10 CFR 35.51(a)(1) and (a)(2).

OR

2. Education, Training, and Experience

☒ I attest that Hong Zhou, PhD has satisfactorily completed the 1-year of full-time
Name of Proposed Authorized Medical Physicist
training in medical physics and an additional year of full-time work experience as required by 10 CFR 35.51(b)(1).

AND

Second Section

Complete the following:

☒ I attest that Hong Zhou, PhD has training for the types of use for which authorization
Name of Proposed Authorized Medical Physicist
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system.

AND

Third Section

Complete the following:

☒ I attest that Hong Zhou, PhD has achieved a level of competency sufficient to
Name of Proposed Authorized Medical Physicist
function independently as an Authorized Medical Physicist for the following:

- ☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

Complete the following for preceptor attestation and signature:

- ☒ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized Medical Physicist for the following:
- ☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

Name of Preceptor Jundong Huang, PhD	Signature <i>Jundong Huang</i>	Telephone Number (808) 535-8615	Date 01/18/2013
License/Permit Number/Facility Name The Cancer Center of Hawaii, NRC #53-27797-01			

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE
AND PRECEPTOR ATTESTATION
[10 CFR 35.51]APPROVED BY OMB: NO. 3150-0120
EXPIRES: 10/31/2008

Name of Proposed Authorized Medical Physicist

Hong ZhouRequested
Authorization(s)
(check all that apply)

- ☐
- 35.400 Ophthalmic use of strontium-90
- ☐
- 35.600 Teletherapy unit(s)
-
- ☒
- 35.600 Remote afterloader unit(s)
- ☐
- 35.600 Gamma stereotactic radiosurgery unit(s)

PART I -- TRAINING AND EXPERIENCE
(Select one of the three methods below)

*Training and Experience, including Board Certification, must have been obtained within the 7 years preceding the date of application or the individual must have obtained related continuing education and experience since the required training and experience was completed. Provide dates, duration, and description of continuing education and experience related to the uses checked above.

☐ 1. Board Certification

- Provide a copy of the board certification.
- Go to the table in 3.c. and describe training provider and dates of training for each type of use for which authorization is sought.
- Skip to and complete Part II Preceptor Attestation.

☐ 2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above

- Go to the table in section 3.c. to document training for new device.
- Skip to and complete Part II Preceptor Attestation

☒ 3. Education, Training, and Experience for Proposed Authorized Medical Physicist

- Education: Document master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university.

Degree

Major Field

College or University

- Supervised Full-Time Medical Physics Training and Work Experience in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

- ☒ Yes. Completed 1 year of full-time training in medical physics (for areas identified below) under the supervision of Robin Stern, PhD who meets the requirements for an Authorized Medical Physicist.

AND

- ☒ Yes. Completed 1 year of full-time work experience in medical physics (for areas identified below) under the supervision of Robin Stern, PhD who meets the requirements for an Authorized Medical Physicist.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

c. Describe training provider and dates of training for each type of use for which authorization is sought.

Description of Training	Training Provider and Dates		
	Remote Afterloader	Teletherapy	Gamma Stereotactic Radiosurgery
Hands-on device operation	University of California Davis Health System - 10/2007 - 9/2009		
Safety procedures for the device use	University of California Davis Health System 10/2007 - 9/2009		
Clinical use of the device	University of California Davis Health System 10/2007 - 9/2009		
Treatment planning system operation	University of California Davis Health System 10/2007 - 9/2009		
Supervising Individual <small>If training is provided by Supervising Medical Physicist, (if more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.)</small>		License/Permit Number listing supervising individual as an authorized Medical Physicist	
Robin Stern, Ph.D.		CA 1334-57	
for the following types of use:			
<input checked="" type="checkbox"/> Remote afterloader unit(s) <input type="checkbox"/> Teletherapy unit(s) <input checked="" type="checkbox"/> Gamma stereotactic radiosurgery unit(s)			

If Applicable:

Authorization Sought	Device	Training Provided By	Dates of Training
35,400 Ophthalmic Use of strontium-90			

d. Skip to and complete Part II Preceptor Attestation.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

3. Education, Training, and Experience for Proposed Authorized Medical Physicist (continued)

b. Supervised Full-Time Medical Physics Training and Work Experience (continued)

If more than one supervising individual is necessary to document supervised training, provide multiple copies of this page.

Description of Training/ Experience	Location of Training/License or Permit Number of Training Facility/Medical Devices Used*	Dates of Training*	Dates of Work Experience*
Medical Physics	University of California, Davis Health System	10/2007 - 9/2009	10/2007 - 9/2009
Performing sealed source leak tests and inventories			
Performing decay corrections	University of California, Davis Health System	10/2007 - 9/2009	10/2007 - 9/2009
Performing full calibration and periodic spot checks of external beam treatment unit(s)	University of California, Davis Health System	10/2007 - 9/2009	10/2007 - 9/2009
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)			
Performing full calibration and periodic spot checks of remote afterloading unit(s)	University of California, Davis Health System	10/2007 - 9/2009	10/2007 - 9/2009
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)			

Supervising Individual**

License/Permit Number listing supervising individual as an
authorized Medical Physicist

Robin Stern, PhD

CA 1324-57

for the following types of use:

☒ Remote afterloader unit(s) ☐ Teletherapy unit(s) ☒ Gamma stereotactic radiosurgery unit(s)

* Training and work experience must be conducted in clinical radiation facilities that provide high-energy external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services.

* 1 year of Full-time medical physics training and 1 year of full time work experience cannot be concurrent.

** If the supervising medical physicist is not an authorized medical physicist, the licensee must submit evidence that the supervising medical physicist meets the training and experience requirements in 10 CFR 35.51 and 35.59 for the types of use for which the individual is seeking authorization.

AUTHORIZED MEDICAL PHYSICIST TRAINING AND EXPERIENCE AND PRECEPTOR ATTESTATION (continued)

PART II – PRECEPTOR ATTESTATION

Note: This part must be completed by the individual's preceptor. The preceptor does not have to be the supervising individual as long as the preceptor provides, directs, or verifies training and experience required. If more than one preceptor is necessary to document experience, obtain a separate preceptor statement from each.

First Section

Check one of the following:

1. Board Certification

☐ I attest that _____ has satisfactorily completed the requirements in
10 CFR 35.51(a)(1) and (a)(2).
Name of Proposed Authorized Medical Physicist

OR

2. Education, Training, and Experience

☒ I attest that Hong Zhou has satisfactorily completed the 1-year of full-time
training in medical physics and an additional year of full-time work experience as required by 10 CFR
35.51(b)(1).
Name of Proposed Authorized Medical Physicist

AND

Second Section

Complete the following:

☒ I attest that Hong Zhou has training for the types of use for which authorization
is sought that include hands-on device operation, safety procedures, clinical use, and the operation of a
treatment planning system.
Name of Proposed Authorized Medical Physicist

AND

Third Section

Complete the following:

☐ I attest that Hong Zhou has achieved a level of competency sufficient to
function independently as an Authorized Medical Physicist for the following:
Name of Proposed Authorized Medical Physicist

- ☐ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☐ 35.600 Gamma stereotactic radiosurgery unit(s)

AND

Fourth Section

Complete the following for preceptor attestation and signature:

- ☒ I meet the requirements in 10 CFR 35.51, or equivalent Agreement State requirements for Authorized
Medical Physicist for the following:
☒ 35.400 Ophthalmic use of strontium-90 ☐ 35.600 Teletherapy unit(s)
☒ 35.600 Remote afterloader unit(s) ☒ 35.600 Gamma stereotactic radiosurgery unit(s)

Name of Preceptor	Signature	Telephone Number	Date
Robin Stern, PhD	<i>Robin Stern</i>	916-734-6776	4/11/2012
License/Permit Number/Facility Name University of California Davis Health System CA #1324-57			



DATE

02/12/2013

NAME AND ADDRESS OF APPLICANT AND/OR LICENSEE

The Cancer Center of Hawaii, LLC
ATTN: Ronald Frick,
Radiation Safety Officer
2226 Liliha Street
Honolulu, HI 96817

LICENSE NUMBER

53-27797-01

MAIL CONTROL NUMBER

579987

LICENSING AND/OR TECHNICAL REVIEWER

cmurnahan

This is to acknowledge the receipt of your:

☒ LETTER and/or ☐ APPLICATION

DATED: 01/29/2013

The initial processing, which included an administrative review, has been performed.

☒ AMENDMENT ☐ TERMINATION ☐ NEW LICENSE ☐ RENEWAL

☒ There were no administrative omissions identified during our initial review.

☐ This is to acknowledge receipt of your application for renewal of the material(s) license identified above. Your application is deemed timely filed, and accordingly, the license will not expire until final action has been taken by this office.

☐ Your application for a new NRC license did not include your taxpayer identification number. Please fill out NRC Form 531, located at the following link:

<http://www.nrc.gov/reading-rm/doc-collections/forms/nrc531.pdf>

Send the completed NRC Form 531, by facsimile, to the following number: (301) 415-5387

A copy of your action has been emailed to our License Fee and Accounts Receivable Branch, in our Headquarters office in Rockville, MD. You will be contacted separately if there is a fee issue involved.

Your application has been assigned the above listed **MAIL CONTROL NUMBER**. When calling to inquire about this action, please refer to this control number. Your application has been forwarded to a technical reviewer. Please note that the technical review, which is normally completed within 180 days for a renewal application (90 days for all other requests), may identify additional omissions or require additional information. If you have any questions concerning the processing of your application, our contact information is listed below:

Region IV
U. S. Nuclear Regulatory Commission
DNMS/NMSB - B
1600 E. Lamar Blvd.
Arlington, TX 76011-4511
(817) 200-1103 or (817) 200-1140

BETWEEN:

Accounts Receivable/Payable
and
Regional Licensing Branches

[FOR ARPB USE]
INFORMATION FROM WBL

Program Code: 02230
Status Code: Pending Amendment
Fee Category: 2B 7C
Exp. Date:
Fee Comments:
Decom Fin Assur Req: N

License Fee Worksheet - License Fee Transmittal

A. REGION

1. APPLICATION ATTACHED

Applicant/Licensee: THE CANCER CENTER OF HAWAII LLC
Received Date: 02/04/2013
Docket Number: 3036775
Mail Control Number: 579987
License Number: 53-27797-01
Action Type: Amendment

2. FEE ATTACHED

Amount: _____

Check No.: _____

3. COMMENTS

Signed: _____

Date: _____

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered / /)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:

Amendment: _____

Renewal: _____

License: _____

3. OTHER _____

Signed: _____

Date: _____