

**COMMUNITY
MEDICAL CENTER**
An affiliate of the Saint Barnabas Health Care System

RONALD J. DEL MAURO
President and Chief Executive Officer
Saint Barnabas Health Care System

MARK D. PILLA
Executive Vice President
Saint Barnabas Health Care System
and
Executive Director
Community Medical Center

November 5, 2008

Br. 1

United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

Re: Materials License 29-09806-03

Dear Sir or Madam,

At this time, ⁰²⁰¹²¹⁵⁸Community Medical Center would like to amend its' Materials License, 29-09806-03, to reflect the addition of Darra Conti, MS as an Authorized Medical Physicist for use of Iridium-192 in a High Dose Rate Afterloader Unit for calibrations, spot checks and training.

Please find enclosed Ms. Conti's NRC Form 313A, attestation statement from Richard Tenpenney, MS and a copy of her diploma for your review.

If you have any questions or require additional information, please do not hesitate to contact William Caubet at 732-557-2036. Thank you for your attention in this matter.

Sincerely,



Frank Gelormini
Vice President/Patient Care

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REGION I
2008 NOV 14 AM 11:26

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NRCSS/RCNI MATER. ALS-002



THE TRUSTEES OF
COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME GREETING
BE IT KNOWN THAT

DARRA MARIE CONTI

HAVING COMPLETED THE STUDIES AND SATISFIED THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF SCIENCE

HAS ACCORDINGLY BEEN ADMITTED TO THAT DEGREE WITH ALL THE
RIGHTS PRIVILEGES AND IMMUNITIES THEREUNTO APPERTAINING IN
WITNESS WHEREOF WE HAVE CAUSED OUR CORPORATE SEAL TO BE HERE
AFFIXED IN THE CITY OF NEW YORK ON THE SEVENTEENTH DAY OF OCTOBER
IN THE YEAR TWO THOUSAND AND SEVEN



INTERIM DEAN OF THE FACULTY OF
THE FU FOUNDATION SCHOOL OF
ENGINEERING AND APPLIED SCIENCE



PRESIDENT



Columbia University

Department of Applied Physics and Applied Mathematics

CONGRATULATES

Darra Marie Conti

ON THE COMPLETION OF THE

Program in Medical Physics

FOR THE

Master of Science Degree

10/17/2007

Date

10/17/2007

Date

Irving P. Herman, Chairman

I. Cevdet Noyan, Program Coordinator

**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

Darra Marie Conti

- 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**
- a. Provide a copy of the board certification.
 - b. 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.
 - c. Skip to and complete Part II Preceptor Attestation.

- 2. Current Authorized Medical Physicist Seeking Additional Authorization for use(s) checked above**
- a. Go to the table in section 3.c. to document training for new device.
 - b. Skip to and complete Part II Preceptor Attestation

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

- a. 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
Master Of Science	Medical Physics
College or University	
Columbia University	

- b. 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 Richard Tenpenny 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 Richard Tenpenny 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	Columbia University Community Medical Center License #29-09806-03 Nucletron MicroSelectron Ir192 Unit	9/03-10/07 11/06-11/07	11/07-11/08
Performing sealed source leak tests and inventories	Siemens Primus & Varian 600C Linear Accelerators Community Medical Center License #29-09806-03 Nucletron MicroSelectron Ir192 Unit	11/06-11/07 11/06-07 11/06-11/07	11/07-11/08 11/07-11/08 11/07-11/08
Performing decay corrections	Community Medical Center License #29-09806-03 Nucletron MicroSelectron Ir192 Unit	11/06-11/07	11/07-11/08
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Community Medical Center Siemens Primus & Varian 600C Linear Accelerators	11/06-11/07	11/07-11/08
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)	N/A		
Performing full calibration and periodic spot checks of remote afterloading unit(s)	Community Medical Center License #29-09806-03 Nucletron MicroSelectron Ir192 Unit	11/06-11/07	11/07-11/08
Conducting radiation surveys around external beam treatment unit(s), stereotactic radiosurgery unit(s), remote after loading unit(s)	Community Medical Center License #29-09806-03 Nucletron MicroSelectron Ir192 Unit	11/06-11/07	11/07-11/08

Supervising Individual**

Richard Tenpenny

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

Community Medical Center
License #29-09806-03

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	Richard Tenpenny 11/06-11/07 "Nucletron MicroSelectron HDR User Manual" "MicroSelectron Ir192 User Guide"		
Safety procedures for the device use	Richard Tenpenny 11/06-11/07 "Nucletron HDR Unit Emergency Procedures" "Emergency Procedures for MicroSelectron HDR Ir192" +		
Clinical use of the device	Richard Tenpenny 11/06-11/07 "Nucletron MicroSelectron HDR User Manual" "MicroSelectron Ir192 User Guide"		
Treatment planning system operation	Richard Tenpenny 11/06-11/07 "PLATO Brachytherapy Remote Afterloading User Manual" "Customer Training: PLATO BPS"		

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.)

Richard Tenpenny

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

Community Medical Center
License #29-09806-03

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 Darra Marie Conti 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 Darra Marie Conti 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 Darra Marie Conti 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	Signature	Telephone Number	Date
Richard Tenpenny	<i>Richard Tenpenny</i>	1-732-557-8148	11/04/2008
License/Permit Number/Facility Name			
Community Medical Center, Toms River, NJ License #29-09806-03			

***Training and Experience for Proposed
Authorized Medical Physicist (HDR Brachytherapy)***

This document is to attest that Darra Conti, M.S., has been employed as a full-time Junior Medical Physicist within the Radiation Oncology Department of Community Medical Center (Toms River, NJ) from November 2006 to November 2007 and then as a Staff Physicist from November 2007 to the present (i.e., November 2008). During this time period she has participated in all aspects of clinical Radiation Oncology Physics including External Beam Radiotherapy and Brachytherapy (LDR and HDR). She has participated in all aspects of dose treatment planning on our various RTP computers including 3D conformal plans (External Beam) and dose calculations, IMRT (External Beam) plans, Stereotactic Radiosurgery plans, Brachytherapy plans and related dose calculations, dose calibrations of the three linear accelerators (including spot checks and full calibrations), calibration of the HDR source, spot checks, and all required HDR Brachytherapy quality control and radiation surveys, etc. Further, Darra Conti has been involved with our cranial Stereotactic Radiosurgery program (LINAC-based), as well as, our body (extra-cranial) Radiosurgery program. She also has been trained in and has participated in the routine quality controls for the department's three simulators (both a conventional simulator, as well as, two CT simulators).

Darra Conti's formal full-time training (40 hours/week) in Clinical Radiation Oncology Physics was from November 2006 to November 2007 (1 full year). During this time essentially a master and apprentice relationship was established between Mrs. Conti and myself. ***Mrs. Conti's full time work experience (40 hours per week spent exclusively within our Radiation Oncology Department) began in November 2007 to the present (November 2008 as of the date of this document).*** Her training including all of the areas stipulated in Part 35.51 for the training of an Authorized Medical Physicist as follows:

(b)(1) Holds a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university; and has completed 1 year of full-time training in medical physics and an additional year of full-time work experience under the supervision of an individual who meets the requirements for an authorized medical physicist for the type(s) of use for which the individual is seeking authorization. This 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 and must include ***(Mrs. Conti has met or surpassed these requirements for graduate education, as well as, the 1 year full-time training in Medical Physics in a clinical Radiation Oncology Department. She has also surpassed the full-time work experience of an additional year of a full-time work experience under the supervision of myself as an Authorized Medical Physicist.):***

(i) Performing sealed source leak tests and inventories *(She has performed under my direct supervision leak testing of the various sealed sources within the department.);*

(ii) Performing decay corrections *(She has performed radioactive decay corrections for the HDR Ir-192 source under my direct supervision.);*

(iii) Performing full calibration and periodic spot checks of external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable *(She has performed full calibrations and periodic spot checks of the various linear accelerators, as well as, the HDR remote afterloading device all under my direct supervision (within my physical presence).)* ; and

(iv) Conducting radiation surveys around external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable *(She has performed various mandated radiation surveys of the HDR remote afterloading device and the regions adjacent to the HDR treatment room after various HDR source exchange(s).);* and

(2) Has obtained written attestation that the individual has satisfactorily completed the requirements in paragraphs (c) and (a)(1) and (2), or (b)(1) and (c) of this section, and has achieved a level of competency sufficient to function independently as an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status. The written attestation must be signed by a preceptor authorized medical physicist who meets the requirements in § 35.51, or, before October 24, 2005, § 35.961, or equivalent Agreement State requirements for an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status *(This document is intended to serve as a written attestation by myself that Darra Conti has achieved a level of competency sufficient for her to function independently as an Authorized Medical Physicist for HDR Brachytherapy.);* and

(c) Has training for the type(s) of use for which authorization is sought that includes hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system. This training requirement may be satisfied by satisfactorily completing either a training program provided by the vendor or by training supervised by an authorized medical physicist authorized for the type(s) of use for which the individual is seeking authorization *(This training requirement includes hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system that has been met with training supervised by myself, an Authorized Medical Physicist.)*

Darra Conti has also received training on and performed (under my direct and immediate supervision) the various tasks that make up the daily, monthly, and quarterly quality control measures (as described in the hospital's license application) including the actual calibration of the HDR Ir-192 source (in my physical and immediate presence).

Darra Conti's work experience in our Radiation Oncology Department not only includes the previously submitted HDR Brachytherapy involvement but includes all aspects of modern clinical Radiation Oncology Physics (both External Beam Radiotherapy and Brachytherapy). Further, Darra Conti's work in our Radiation Oncology Department was performed under my direct supervision.

Further, she has received annual Emergency Procedures and Operational training (HDR remote afterloading device) from myself, an Authorized Medical Physicist.

The following is a summary of the various areas and subject matter that I covered with Mrs. Conti during her training period in Radiation Oncology:

NRC License and 10 CFR Part 35 Requirements for HDR Brachytherapy (including the section of hospital's NRC Quality Management Program with special attention to the various HDR Brachytherapy requirements)

F.H. Khan, *Treatment Planning in Radiation Oncology* (the entire book was covered with special emphasis on Chapter 11, Isodose Planning – Brachytherapy, Chapter 12 Treatment Planning Evaluation, and Chapter 13 Fractionation: Radiobiological Principles and Clinical Practice)

G.C. Bentel, *Treatment Planning & Dose Calculation in Radiation Oncology* (the entire book was covered with special emphasis on Chapter 5, Brachytherapy, Chapter 7, Practical Treatment Planning, and Chapter 8, Normal Tissue Consequences)

AAPM Monograph No. 26, General Practice of Radiation Oncology Physics in the 21st Century (Chapters 7, Dose Prescriptions TG-43 Dosimetry Protocol, and Chapter 9, HDR Techniques)

H.E. Johns & J.R. Cunningham, *The Physics of Radiology* (the entire book was covered with special emphasis on Chapter 13, Brachytherapy, and Chapter 17, Radiobiology)

F.H. Khan, *The Physics of Radiation Therapy* (the entire book was covered with special emphasis on the chapters concerning both LDR and HDR Brachytherapy)

E.J. Hall, *Radiobiology for the Radiologist* (Chapter 14, Time, Dose, & Fractionation in Radiotherapy)

J.F. Williamson et al, *AAPM Brachytherapy Physics, AAPM Summer School Proceedings 1994* (Chapter 1, History of Brachytherapy, Chapter 2, Physical Properties and Clinical Uses of Brachytherapy Radionuclides, Chapter 4, Brachytherapy Source Strength: Quantities, Units, and Standards, Chapter 7, Principles of Brachytherapy Quality Assurance, Chapter 8, Brachytherapy Regulatory Environment, Chapter 24, Principles of Remote Afterloading Devices, Chapter 27, Source Strength Standards and Calibration of HDR/PDR Sources, and Chapter 31, Clinical Implementation of HDR Intracavitary and Transluminal Brachytherapy)



Richard Tenpenny, M.S., DABR, DABMP
Chief Physicist, Radiation Oncology Department
Community Medical Center
99 Route 37 West
Radiation Oncology Department
Toms River, NJ 08755

Date: November 4, 2008

Board Certifications:
ABR (Therapeutic Radiological Physics)
ABMP (Radiation Oncology Physics)

NRC Authorized Medical Physicist

This is to acknowledge the receipt of your letter/application dated

11/5/08, and to inform you that the initial processing which includes an administrative review has been performed.

Amendment (29-09806-03) There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 143002.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.