Cancer Center of Virginia
MediCorp
6105 Health Center Lane
Fredericksburg, VA 22407
(540) 786-5262

Conrado C. Gonzalez, Jr., MD
Wilson B. Sprenkle, MD
Frederick W. Willison, MD
Board Certified Radiation Oncologists
American Board of Radiology (Therapeutic)

April 16, 2008

Br. 1

Penny Lanzisera
Senior Health Physicist
Medical Branch
Division of Nuclear Materials Safety

Subject: Addition of an authorized user and authorized Medical Physicist to License No. 45-00935-02 03008082

Please add the following to the Mary Washington Hospital License

1. Conrado C. Gonzales, Jr., MD Authorized User
   (previous license No 45-16231-01)
2. Bushra Rana, PhD Authorized Med Physicist

Attached are the documents required by NRC as in their letter dated June 10th 2007.

Sincerely

Eileen Dohmann
Vice President
Mary Washington Hospital

cc:
Linda Prowett, RSO
William Pan, Director Med Physics Division

RECEIVED
2008 JUL 15 AM 10:28

142617
NMSS/RGN1 MATERIALS-002

ATTACHED DOCUMENTS

Attached are documents as required per letter from NRC dated June 10th, 2007 for adding Dr C Gonzalez and Dr Bushra Rana for HDR License No: 45-00935-02

1. Vendor training certificates
2. Detailed description of medical Physics Training for Dr Bushra Rana
3. Copy of University Diploma and copy of her transcript
4. NRC Form 313A

VARIAN
medical systems

BRACHYTHERAPY

Product Education Certificate

Presented To:

Bushra Rana, Ph.D.

For Attending the Training Course on the
SmartSeed™ HDR BrachyTherapy System
Including
VariSource™ HDR Afterloader and
BrachyVision™ Treatment Planning System

Training Course Date: November 19, 20 2007

Instructor John Morrison, M.S.

Varian BrachyTherapy – The Better Solution.

PARTNERS FOR Life

VARIAN
medical systems

BRACHYTHERAPY

Product Education Certificate

Presented To:

Conrado C Gonzales,M.D.

For Attending the Training Course on the
VariSource™ HDR Afterloader Unit
BrachyVision™ Treatment Planning System

Training Course Date: November12, 13 2007

Instructor John Morrison, M.S.

Varian BrachyTherapy – The Better Solution.

PARTNERS FOR Life

2. Detailed Description of training provided by William Pan to Dr Bushra Rana

- Medical Physics
- Sealed Source Leak test and inventories
- Performing Decay Corrections
- Linac Operation
- Treatment Planning System and Dosimetry
- Linac FULL Calibration Monthly, Daily and Annually
- Periodic teletherapy unit spot checks
- CT Simulator
- IGRT
- Sterotactic Radiosurgery treatment, Calibration and QA as per NRC requirements
- Sterotactic Radiosurgery Unit Spot Checks
- Annual Inspection for machines

- Radiation Safety Surveys for External Beam therapy Sterotactic Radio surgery and Varian Afterloader Unit
- HDR Afterloader unit hands on device operation and emergency procedures
- HDR After loader Unit Saftey procedures for device use
- HDR After loader Unit Clinical Use
- HDR treatment planning system operation and commissioning
- HDR afterloader unit Full calibration for a source change, following repair of unit and periodic calibrations as per NRC requirements
- HDR unit Quality Assurance
- Radiobiology
- Human Anatomy Image based
- Radiation Dosimetry
- HDR Brachytherapy Dosimety
- Radiation Saftey and handling Instructions for the brachytherapy source
- Source leakage test, retaining leak test records and removing of contamination
- Inventory of sources
- Spot Checks for HDR unit and Acceptance Criteria as per NRC requirements
- Shielding Calculations

Books used in training

- Physics of Radiation Therapy
- Radiobiology for Radiologist
- Principles and Practice of Brachytherapy using after loading systems
- High Dose Rate Brachytherapy
- Review of Radiation Oncology Physics

DUPLICAT

93.awl.197

Serial No. MS 19865

رجسٹرڈ نمبر
REGISTERED NUMBER

UNIVERSITY OF THE PUNJAB

1997

This is to Certify

that Bushra Rana

son/daughter of [redacted]

of the Department of Physics Govt.College Lahore

has obtained the degree of

Master of Science

Physics

in this University at the Examination held in August, 1998 *and that he/she was placed in the* First *Class.*

The Examination was taken as a whole /~~in parts~~

Marks obtained 802/1200

PERSONAL INFORMATION WAS REMOVED BY NRC. NO COPY OF THIS INFORMATION WAS RETAINED BY THE NRC.

Chancellor Duplicate Degr
signed by the

CHANCELLOR

LAHORE: 15 MAR 2003

CONTROLLER OF EXAMINATIONS امتحانات

DUPLICATE

93.awl.197

رجسٹرڈ نمبر
REGISTERED NUMBER

Serial No. MS 19865

846

رول نمبر
ROLL NUMBER

UNIVERSITY OF THE PUNJAB

پنجاب یونیورسٹی

1997

This is to Certify

1997

تصدیق کی جاتی ہے

that Bushra Rana

کہ بشریٰ رانا

son/daughter of [redacted]

بن / بنت رانا نور پرویز

of the Department of Physics Govt.College Lahore

از شعبہ فزکس۔ گورنمنٹ کالج ۔ لاہور

has obtained the degree of

نے اس یونیورسٹی کے امتحان منعقدہ اگست ۱۹۹۸ کی بنا پر

Master of Science

Physics

ایم ۔ ایس سی

فزکس

in this University at the Examination held in August, 1998 and that he/she was placed in the First Class.

کی ڈگری درجۂ اول میں حاصل کی

The Examination was taken as a whole/~~in parts~~.

انہوں نے کلی / ~~جزوی~~ امتحان میں شرکت کی ۔

Marks obtained 802/1200

نمبر حاصل کردہ ۱۲۰۰/۸۰۲

Chancellor Duplicate Degree is not signed by the

CHANCELLOR

چانسلر

CONTROLLER OF EXAMINATIONS

کنٹرولر امتحانات

LAHORE: 15 MAR 2003

لاہور:

com expires 12-31-05

PERSONAL INFORMATION WAS REMOVED BY NRC. NO COPY OF THIS INFORMATION WAS RETAINED BY THE NRC.

N-283—Punjab University Press—50 Books of 100 each—19-6-99 Form No. E-207

UNIVERSITY OF THE PUNJAB

Book No..... Serial No...10279.....

Roll No...846... Registered No...93.awl.197.

~~M.A.~~/M. Sc. Part II First/~~Second~~ Annual Examination. 1997

Subject.....Physics.....

PASS RESULT INTIMATION

Name .....Bushra Rana.....

Son/daughter of...[redacted].....

Candidate mentioned above is hereby informed that he/she has passed the M.A./M.Sc Part II First/Second Annual Examination, 1997, held in....Aug..1998 Obtaining 802/1200 marks.....I.....Division

Marks obtained by him/her in each Paper are given below :—

Papers	Marks	Paper	Marks
I	55/100	VIII	/100
II	60/100	IX	/100
III	74/100	X	/100
IV	/100	XI	/100
V	/100	XII	/100
VI	167/200		/100
VII	/100		/100
		Total	356/500
		Total Marks obtained in Part I :	446/700
		Grand Total :	802/1200

Note :—This Result Intimation is issued, errors and omissions excepted, as a Notice only.

Senate Hall, Lahore.
Dated.....5/7/1999

Prepared by...

Checked by Asstt. & Signed.....

Assistant Controller Examinations (III), &
for Controller

Checked Admin. Officer III Signed..

PERSONAL INFORMATION WAS REMOVED BY NRC. NO COPY OF THIS INFORMATION WAS RETAINED BY THE NRC.

UNIVERSITY OF THE PUNJAB

Serial No. 001468

Roll No. 000867

Regt. No. 93-avl-192

RESULT INTIMATION CARD

PASS RESULT INTIMATION

Name of the Candidate: Bushra Rana

Father's Name: [redacted]

Candidate mentioned above is hereby informed that

She has passed the B.Sc. First Annual Examination 1995 held in May 1995 in the IInd Division, obtaining 419/800 marks.

Marks obtained by her in each subject are given below:-

S.No	Subjects/Papers	Marks Obtained	Maximum Marks	Remarks
1.	Isl.Studies/ Pak.studies (Comp)	71	100	
2.	English Language (Comp. B.Sc.)	68	100	
3.	Mathematics (A)	71	200	
4.	Biology	83	200	
5.	Physics	126	200	
	TOTAL	419	800	

Note: This result intimation is issued under the provisions, as a notice only. Anomaly appearing in it does not in itself confer any right or privilege independently to the grant of a proper Certificate/Diploma/Degree which will be issued under the regulations in due course.

Senate Hall, Lahore.

Dated: November 18, 1995

Assistant Controller (Examinations)

comp 12-31-05

PERSONAL INFORMATION WAS REMOVED
BY NRC. NO COPY OF THIS INFORMATION
WAS RETAINED BY THE NRC.

NRC FORM 313A (AMP)
(10-2006)

U.S. NUCLEAR REGULATORY COMMISSION

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
Bushra Rana, PhD

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
PhD	Medical Physics
College or University: Punjab University, Lahore	

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 Weiping Pan 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 Weiping Pan who meets the requirements for an Authorized Medical Physicist.

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	Cancer Center of VA Lic # 45-00935-02 Varian + Primus Linacs Seed Implants Pd-103 + Sr-90	1-4-05 to 1-30-06	2-15-06 to 2-15-07
Performing sealed source leak tests and inventories	Cancer Center of VA Lic # 45-00935-02 Varian + Primus Linacs Seed Implants Pd-103 + Sr 90	1-4-05 to 1-30-06	2-15-06 to 2-15-07
Performing decay corrections	Cancer Center of VA Lic # 45-00935-02 Varian + Primus Linacs Seed Implants Pd-103 + Sr-90	1-4-05 to 1-30-06	2-15-06 to 2-15-07
Performing full calibration and periodic spot checks of external beam treatment unit(s)	Cancer Center of VA Lic # 45-00935-02 Varian + Primus Linacs Seed Implants Pd-103 + Sr-90	1-4-05 to 1-30-06	2-15-06 to 2-15-07
Performing full calibration and periodic spot checks of stereotactic radiosurgery unit(s)	N/A	~~1-4-05~~ ~~to~~ ~~1-30-06~~	
Performing full calibration and periodic spot checks of remote afterloading unit(s)	Divine Providence Hospital Lic # 37-16101-02	4-1-01 to 5-30-03	6-1-03 to 6-30-04
Conducting radiation surveys around external beam treatment unit(s), sterotactic radiosurgery unit(s), remote after loading unit(s)	Divine Providence Hospital Lic # 37-16101-02	4-1-01 to 5-30-03	6-1-03 to 6-30-04

Supervising Individual**

Weiping Pan

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

37-16101-02

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	4-1-01 to 5-30-03	1-4-05 to 1-30-06	
Safety procedures for the device use	4-1-01 to 5-30-03	1-4-05 to 1-30-06	
Clinical use of the device	4-1-01 to 5-30-03	1-4-05 to 1-30-06	
Treatment planning system operation	4-1-01 to 5-30-03	1-4-05 to 1-30-06	

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

Weiping Pan

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

37-16101-02

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.

NRC FORM 313A (AMP) U.S. NUCLEAR REGULATORY COMMISSION
(10-2006)

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 BUSHRA RANA 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 BUSHRA RANA 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 BUSHRA RANA 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
WEIPING PAN	Weiping Pan	540-786-5275	4/17/07

License/Permit Number/Facility Name
37-16101-02 / Divine Providence Hospital

This is to acknowledge the receipt of your letter/application dated received 7/15/08, and to inform you that the initial processing which includes an administrative review has been performed.

☐ 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** 142617.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader