030-00451

University of Pittsburgh
RADIATION SAFETY OFFICE

January 13, 1989

U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Dear Sir or Madam:

It is requested that Ms. Gwendolyn King be added to the following University of Pittsburgh Licenses as a Teletherapy Physicist:

37-00245-05
37-00245-07
37-00245-09

Attached is a copy of her qualifications for your review.

If you have any questions or more information is desired, please contact this office.

Very truly yours,

Niel Wald

Niel Wald, M.D.
Chairman
Radiation Safety Committee

NW:DBV

Attachment

FEE EXEMPT
170.11(a)(4)

ROOM A-550 CRABTREE HALL, PITTSBURGH, PA 15261 (412) 624-2728,2729

Gwendolyn C. King M.Sc.
2480 16th St. N.W.#503
Washington D.C. 20009
Telephone: (202) 483 5329
865 1423(W)

EDUCATION: M.Sc., Physics, Howard University,
Thesis: An Investigation of the LIXISCOPE using monochromatic radiation. May 1980

B.A., Chemistry, College of the Virgin Islands, 1977

A.A., Liberal Arts, College of the Virgin Islands, 1975.

SCHOLASTIC HONORS:
Best student, Thermodynamics, Howard University, 1977
Best Student, Physical Mechanics, Howard University, 1976

BOARD ELIGIBLE:
Will be sitting for ABR Radiological Physics certification Oct. 1988

FACULTY APPOINTMENTS:
Instructor, Howard University, College of Allied Health 1982/pres
Instructor, Howard University, College of Medicine 1982/pres
Graduate Student Advisor - Master's Thesis research May 1988

TEACHER ASSISTANT:
Department of Physics, Howard University 1977-80
Department of Physics, Howard University Summer 1976
Department of Physics, Howard University Summer 1977

EXPERIENCE IN RADIOTHERAPY:
Engineer-Physicist Department of radiotherapy, Howard university Hospital 9/80-1986
Medical Physicist, Department of Radiotherapy, Howard University Hospital 1986 to present

This position includes assuming the responsibilities of the chief physicist during his absences. Supervision of the mold technologist. Participation in all aspects of treatment planning of patients -bracytherapy, external beam, intraoperative radiotherapy and the combination of these with hyperthemia. Quality assurance of all therapy equipment. Designs, improve and implemented ancillary accessories and treatment aids to be attached and/or incorporated into existing equipments, eg. molds, blocks wedges. Ordering and keeping adequate supply of spare parts for machines and equipment. Procures, receives and arranges for the secure storage of all radioactive materials. Keeping annual inventory of radioactive isotopes. Monitoring the radiation exposure of individuals. Participates in formal lectures in

Medical Physics to residents, physicians, medical students, technological staff, and other radiotherapy staff menbers.

EXTERNAL BEAM:

Janus Co-60, Linear Accelerators (Clinac 4, Clinac 18)
Test and calibrations of teletherapy machines, spot checks physical measurements and mathematical calculations of dose distribution patterns, dose rates, shielding requirements and specifications for beam modifying devices, depth dose curves computerized treament planning for external beam, interstitial intracavitary, irregular fields, rotational and fixed field and other isodose techniques.

REMOTE AFLERLODING TECHNIQUE (RAL);

Calibration and spot check of Co-60 Remote afterloading equipment isodose distribution, and treatment of patients.

ELECTRON BEAM:

clinac 18(6e, 9e, 12e, 15e, 18e)
Calibration of electron beam cones, depth dose curves, dose rates, shielding requirements and specifications for beam modifying devices.

HYPERTHERMIA:

Calibration of Clintherm Mark VI microwave Hyperthermia system, antennae and temperature sensors. Treatment of patients with both interstitial,external hyperthermia and simultaneous intraoperative radiotherapy with hyperthermia.

INTRAOPERATIVE ELECTRON BEAM:

Calibration of intraoperative electron beam cones, dose rates, depth dose curves, shielding requirements and specifications for beam modifying devices.

BRACHYTHERAPY:

Experience with I-125, Ir-192, Cs-137, P-32, I-131, Sr-90 Co-60 remote afterloading.

RADIATION SAFETY:

Familiar with NRC, JCAH guidelines and the District of Columbia radiation safety guidelines.

COMPUTER EXPERIENCE:

Familiar with IBM PC, Apple II, Sloan Kettering Memorial Dose Distribution Computer system and AECL treatment planning system.

PROFESSIONAL AFFILIATION:

American Physics Society 1980 to pres.
American Association of Physicist in Medicine, Mid-Atlantic chapter. 1980-pres.
American Association of Physicist in Medicine, Mid-Atlantic chapter. Member, Membership Committee.
Radiation Protection Committee Howard Unviersity Hospital
National Society of Black Physicist

CONTINUING EDUCATION:

Sloan Kettering Memorial Hospital, Update in Brachytherapy 1984
Howard University, Master Program Computer Science 1981-82
M.D. Anderson Hospital and Tumor Institute University of Texas Cancer Center. External beam, Interstitial and Intracavitary Dosimetry Principles. 1982
Howard university Radiation Safety Office. Introductory course in basic radiation safety. 1981

DIPLOMA:

Hyperthermia Treatment Course Clinitherm Corporation 1986

PUBLISHED ABSTRACT:

Dose distribution for combined external photon and intraoperative electron radiotherapy in intra-cranial malignancies. J. Nibhanupudy A. Goldson, E. Ashayeri, M. Jacobs, G. King. Medical Physics Vol 10 #4 p 524 1983

Dose Distribution for the treatment of Pancreas Carcinoma with intraoperative radiotherapy, I-125 and external beam irradiation G. King, J. Nibhanupudy, O. Streeter, A. Goldson, N. Lim Medical Physics Vol. 11 #3 p305 1984

Dose Distribution in the afterloading Intracavitary irradiation in the treatment of Nasopharyngial Maligancies. J. Nibhanupudy G. King, E. Ashayeri, A. Goldson. Medical Physics Vol. 12#4 p 535 1985

Simultaneous Intraoperative Interstitial Hyperthermia (IOHT) and Intraoperative Radiation Therapy (IORT) with electrons J. Nibhanupudy A. Goldson, E. Ashayeri, F. Galal, G. King, C. Staud. Medical Physics Vol13 #4 p569 1986

Pertubation effects due to Simultaneous Intraoperative Hyperthermia and Intraoperative Radiotherapy. C. Staud, E. Ashayeri, F. Landes, G. King, J. Nibhanupudy. Medical Physics Vol 14 #3 p493 1987

The use of Double node antennae for simultaneous Intraoperative interstitial hyperthermia and intraoperative radiotherapy with electrons. G. King, J nibhanupudy, J. Smyles, A. Goldson, E. Ashayeri (in press) 1988

PAPER PRESENTATIONS:

"The effect of radiation on Normal Tissue" University of the District of Columbia School of Nursing. Washington D.C. 1985

"The role of the Medical Physicist in the battle against Cancer." Virginia State University, Petersburg Va. (summer School program) 1987

Pertubation effects due to Simultaneous Intraoperative hyperthermia and intraoperative radiotherapy. AAPM 29th annual meeting Detroit Michigan 1987

Simultaneous Intraoperative interstitial hyperthermia and intraoperative radiation therapy with electrons. Graduate School of Physics, Lincoln Univ. Lincoln PA 1987

Simultaneous Intraoperative interstitial hyperthermia and intraoperative radiation therapy with electrons. 2nd annual meeting of the National Society of Black Physicists. Philadelphia PA 1987

Simultaneous intraoperative radiation therapy combined with interstitial intraoperative hyperthermia for pancreatic cancer. Physics Department, M.D. Anderson Hospital Houston Texas 1987

PUBLICATIONS:

Treatment of a Down Syndrome patient for hyperthyroidism with radioactive I-131. J. Nibhanupudy, O. Streeter, G. King et al JNMA Vol. 78 #2 1986

The use of Interstitial Hyperthermia to produce homogeneous heat distribution patterns. G King, A. Goldson, F Galal, E. Ashayeri. JNMA Vol79 #2 1987

Simultaneous Intraoperative radiation therapy and intraoperative interstitial hyperthermia for unresectable adenocarcinoma of the pancreas. A. Goldson, J. Smyles, E. Ashayeri, R Dewitty, J. Nibhanupudy, G. King Endocurietherapy/ hyperthermia oncology Vol.3 p201-208 1987

RESEARCH EXPERIENCES:

The establishment of isotherm pattern using invasive hyperthermia. ASTRO-200 radiofrequency 1984-85

Dosimetry problems associated with doublenode antennae used for interstitial microwave antennae 1988

HONORS:

President of the student Body, College of the Virgin Islands St. Croix campus 1974-75

Special Section Write-up by the American Physical Society on the status of women in Physics. "Physics help in the battle against cancer". 1983

Selected as Outstanding young women of America 1987

MO-1C
1-24-89

(FOR LFMS USE)
INFORMATION FROM LTS

BETWEEN:

LICENSE FEE MANAGEMENT BRANCH, ARM
AND
REGIONAL LICENSING SECTIONS

PROGRAM CODE: 02300
STATUS CODE: 0
FEE CATEGORY: EX 7A
EXP. DATE: 19910930
FEE COMMENTS: 170.11(A)(9)_STATE_

LICENSE FEE TRANSMITTAL

A. REGION

1. APPLICATION ATTACHED
APPLICANT/LICENSEE: PITTSBURGH, UNIVERSITY OF
RECEIVED DATE: 890119
DOCKET NO: 3000451
CONTROL NO.: 110141
LICENSE NO.: 37-00245-05
ACTION TYPE: AMENDMENT

2. FEE ATTACHED
AMOUNT: $0
CHECK NO.: 0

3. COMMENTS

SIGNED EGM D
DATE 1-25-89

B. LICENSE FEE MANAGEMENT BRANCH (CHECK WHEN MILESTONE 03 IS ENTERED /↘/)

1. FEE CATEGORY AND AMOUNT: EX 7A FEE EXEMPT

2. CORRECT FEE PAID. APPLICATION MAY BE PROCESSED FOR: 170.11(a)(4)
AMENDMENT ↘
RENEWAL
LICENSE

3. OTHER

CA

SIGNED S. Kimberly
DATE FEB 06 1989