

# LEE SAUNDERS ANTHONY

## Personal Resume

**BORN:** Roanoke, Virginia

**EDUCATION:** B.S. in Chemistry; Roanoke College, Salem, Va.

M.S. in Nuclear Engineering Physics, V.P.I.,  
Blacksburg, Virginia

Ph.D. in Physics (Nuclear and Reactor); V.P.I.,  
Blacksburg, Virginia

Postgraduate course work in Medical Physics at  
the University of Texas' M.D. Anderson Hospital,  
Houston, Texas

- (1) External Beam, Interstitial and Intracavity  
Dosimetry-Principles (1974)
- (2) External Beam, Interstitial and Intracavity  
Dosimetry-Manual and Computer
- (3) High Energy Electron, X-Ray and Neutron  
Dosimetry (1974)
- (4) High Energy Electron, X-Ray and Neutron  
Dosimetry (February 1987)

### **DURATION OF MEDICAL PHYSICS/THERAPY PHYSICS EXPERIENCE:**

Since 1963.

SITES for which Therapy Physics was performed vary over the years,  
as contracts come and go. They include:

- (1) Roanoke Memorial Hospitals (17 years)  
Radiation Safety Officer, Physics Department  
Head, Diagnostic, Nuclear Medicine, Therapy  
Physics.
- (2) The Memorial Hospital, Danville, Virginia
- (3) Bluefield Regional Medical Center,  
Bluefield, West Virginia
- (4) Rockingham Memorial Hospital, Harrisonburg, Va.
- (5) Humana Hospital Clinch Valley, Richlands, Va.
- (6) Plus other miscellaneous sites with Orthovoltage  
and/or superficial therapy units.

TECHNICAL TRAINING OTHER THAN EDUCATION:

- (1) Former Electronics Technician, U.S.N.R.
- (2) Took and taught courses in Electronics at the collegiate level.

ACCELERATOR CONSTRUCTION = (3)

Worked on the construction of one; collaborated on the construction of another, and supervised the construction of a third research accelerator.

ACCELERATOR INSTALLATION/ACCEPTANCE/BEAM DATA ACQUISITION:

Two Siemens MD machines and two Siemens MevaSim simulators; one Philips SL-18 Linac, and one Philips simulator.

CREDENTIALS:

- (1) "Certified Health Physicist (Comprehensive)" by the American Board of Health Physics. Feb. 1, 1980.
- (2) "Certified Radiological Physicist" (which includes Diagnostic, Nuclear Medicine, and Radiation Therapy) by American Board of Radiology. June 4, 1982.
- (3) "Certified Medical Physics" by American Board of Medical Physics. Feb. 16, 1991.
- (4) Certified as an Executive Level Healthcare Safety Professional by International HealthCare Safety Professional Board. Oct. 28, 1981.
- (5) Designated as a "Certified Product Safety Manager," Senior Level, by the International Product Safety Management Certification Board. Oct. 1981.
- (6) Designated as a "Certified Hazard Control Manager," Senior Level, by the Hazard Control Manager Certification Board. Oct. 1981.
- (7) Served as Radiation Safety Officer for:
  1. Roanoke College, 1962-1977
  2. Physics Associates, LLC
  3. VAMC Salem, Virginia
  4. Roanoke Memorial Hospital
  5. Clinch Valley Physicians, Inc.
  6. Page Memorial Hospital
  7. Southside Community Hospital
  8. Summersville Community Hospital

ACADEMIC EXPERIENCES:

Faculty member of Roanoke College 1962-1979. During most of that time, was Professor of Physics and Physics Department Head. Also served two years as Acting Dean of the College.

Taught "Modern Physics" at James Madison University in 1992.

MANAGERIAL EXPERIENCE:

In addition to the above academic experience, served as senior partner and now proprietor of Physics Associates since 1963.

Also served in the U.S. Naval Reserve and retired as Captain (O-6), having held four commands.

ORGANIZATION AFFILIATIONS:

- (1) Sigma Pi Sigma, Physics Honor Society
- (2) Sigma Xi; Honorary Research Society
- (3) American Physical Society
- (4) American Association of Physicists in Medicine
- (5) Health Physics Society (past president, Virginia Chapter)
- (6) American College of Radiology
- (7) ASTRO (American Society for Therapeutic Radiology and Oncology)
- (8) IRPA (International Radiation Protection Association)

RECENT CONTINUING EDUCATION:

- (1) ESTRO Meeting, Budapest, Hungary, October 1992.
- (2) AAPM Screening Mammography Symposium, Acapulco, Mexico – September 30-October 1, 1993.
- (3) 1 hour of Medical Education for Physics provided by a professional viewing of the ACR video *The Art of Positioning Level 1: Basic Positioning*, in May 1994
- (4) 9.5 hours of Medical Physicist Continuing Education credits provided by the June 1995 Conference on Mammography and MQSA: The Physicist's Role, at the University of Buffalo: Amherst, New York. State University of New York at Buffalo.

- (5) 3 hours – Professional Viewing of Nuclear Associates Video: *Processing Quality Control*. Reading of Kodak Publications: (a) *Artifacts in Mammography*, and (b) *Identifying and Correcting Processing Artifacts*.” Discussion of above video and publications – 1995.
- (6) 1.5 hours – Professional Viewing and Discussion of Nuclear Associates Video: *Quality Assurance in Screen-Film Mammography*,” October 1995.
- (7) 10 hours – *Fluoroscopy: Exposure, Injuries and Intervention*,” September 22-23, 1995, University of Virginia Health Sciences Center.
- (8) IRPA Meeting in Vienna, Austria, April 14-19, 1996.
- (9) Non-ionizing Radiation Seminar in Baden, Austria, April 22-24, 1996.
- (10) 12 hours – *Emerging Issues in Mammography*,” September 20-21, 1996. Sponsored by AAPM and the University of Virginia in Charlottesville, Virginia.
- (11) 1 hour – Professional Review and Viewing of *Instrumentarium Information* and Video of the *Alpha R.T. and Eklund Positioning System*, April 1996.
- (12) 15.5 hours – *Breast Imaging Weekend Review Course*. January 15-18, 1998, sponsored by North Carolina Chapter of American College of Radiology.
- (13) 15 hours – *Emerging Issues in Mammography*, September 24-25, 1999, sponsored by the University of Virginia School of Medicine, Charlottesville, Virginia.
- (14) 15 hours – *The 19<sup>th</sup> Annual Pittsburgh Breast Seminar*, October 28-31, 1999, sponsored by the Pittsburgh Mercy Health System and Pittsburgh Breast Imaging Seminar Associates.
- (15) IRPA Meeting in Hiroshima, Japan, May 14-19, 2000.
- (16) 15 hours – *The 20<sup>th</sup> Annual Pittsburgh Breast Seminar*, August 9-13, 2000, sponsored by the Western Pennsylvania Hospital and Pittsburgh Breast Imaging Seminar Associates.
- (17) 15 hours – *The 6<sup>th</sup> Annual Seminar on Physics of Mammography*, May 9-10, 2002, sponsored by MTMI (Medical Technology Management Institute).
- (18) 12 hours – *Hands-On Workshop for Surveying Digital Mammography Units*,” August 23-24, 2002, sponsored by MTMI (Medical Technology Management Institute).

- (19) 12 hours – *Hands-On Multi-Slice CT Workshop for Physicists*, June 21-22, 2003, sponsored by MTMI (Medical Technology Management Institute), M.D. Anderson Cancer Center, Houston, TX.
- (20) *11<sup>th</sup> International Congress of the International Radiation Protection Association (IRPA)*.  
23-28 May 2004 Madrid, Spain.
- (21) 15 hours – *“The Physics of Mammography 2004”*,  
October 2-3, 2004; Boston, MA. Sponsored by MTMI (Medical Technology Management Institute).
- (22) 15.5 Category A CE credits – Brachytherapy Treatment Planning Version 14.2 at Nucletron, Columbia, MD  
March 14<sup>th</sup>-17<sup>th</sup>, 2005.
- (23) 21 hours – *“MRI Hands-On Workshop for Physicists”*,  
April 28-30, 2006, sponsored by MTMI (Medical Technology Management Institute); M.D. Anderson Cancer Center; Houston, TX.
- (24) 9 hours – *“Selenia Installation and Acceptance Training”*,  
October 6, 2006, sponsored by Hologic; Product Training in accordance with MQSA for Digital Mammography Systems.
- (25) *12<sup>th</sup> IRPA (International Radiation Protection Agency)*,  
Oct. 20-24, 2008, Argentina.
- (26) 15 hours – *“A Review of CT Imaging for Physicists”*,  
September 25-26, 2009; Las Vegas, NV. Sponsored by MTMI (Medical Technology Management Institute).
- (27) 15.5 hours – *“13<sup>th</sup> Annual Mammography Update for Physicists”*,  
October 9-10, 2009; Colorado Springs, CO. Sponsored by MTMI (Medical Technology Management Institute).
- (28) 20.75 credits – *“The Physics of Nuclear Medicine”*, Nov. 5, 2009, sponsored by MTMI.
- (29) 15 hours – *“Hands-On Ultrasound Physics Workshop”*,  
April 24-25, 2010; Milwaukee, WI. Sponsored by MTMI (Medical Technology Management Institute).
- (30) 12 hours – *“Hands-On Nuclear Medicine Physics Workshop”*,  
September 10-11, 2011; University of Iowa Medical Center; Sponsored by MTMI.
- (31) *13<sup>th</sup> IRPA (International Radiation Protection Agency)*,  
13-18 May 2012, Glasgow, Scotland.

- (32) 15.5 hours – *“16<sup>th</sup> Annual Mammography Update for Physicists”*, October 13-14, 2012, Boston, MA; Sponsored by MTMI (Medical Technology Management Institute).

**COMPUTER EXPERIENCE:**

Most of my Therapy Treatment Planning Computer experience has been with the Artonix PC-12 System, which is now upgraded and marketed by CMS of St. Louis, Missouri. I have visited their factory, observed their facility, products and personnel. I have also recently visited an ADAC site in Atlanta, Georgia. At both sites, I was able to get “hands-on” acquaintance with the latest units. I now have over two “person-years” experience with the CMS Modulex/Dynascan systems.

Rockingham Memorial Hospital now has the CMS Modulex and Dynascan System. I have used the CMS Modulex and Dynascan Systems for the acceptance testing and calibration of the Siemens Mevatron MD Linear Accelerators at this institution.

**HOSPITAL TEACHING EXPERIENCE:**

While at Roanoke Memorial for many years, I taught Medical Physics as appropriate to students in X-Ray, Nuclear Medicine and Radiation Therapy.

**TYPES OF MACHINES ON WHICH PHOTON AND/OR ELECTRON DOSIMETRY/CALIBRATION HAVE BEEN MADE**

1. Cobalt-60
  - (a) AECL Eldorado 6
  - (b) AECL Theratron 80
  - (c) AECL Theratron 780 (2)
  - (d) Mobaltron 80
  
2. Accelerators (at M.D. Anderson)
  - (a) Sagittarie 25 MB Linear Accelerator
  - (b) Allis-Chalmers
  - (c) AECL Therac 6 MV Linear Accelerator
  - (d) AECL Therac 20 MV Linear Accelerator

- (e) Siemens Mevatron 80 Linear Accelerator on which Photon and/or Electron Dosimetry/Calibration Measurements have been made.
3. Accelerators:
- (f) Siemens Mevatron MD Linear Accelerator at Bluefield Community Hospital
  - (g) Siemens Mevatron MD Linear Accelerator at Rockingham Memorial Hospital
  - (h) Philips SL-18 Linear Accelerator at Humana Hospital Clinch Valley
  - (i) G.E. Saturn 41 at Hazard, Kentucky
- Orthovoltage and Superficial Machines of various types.

**ARCHITECTURAL DESIGN; FACILITY LAYOUT; RADIATION SHIELDING SPECIFICATION, DESIGN AND EVALUATION:**

I have worked primarily with five local Architectural/Engineering firms on Radiation Therapy projects:

- (1) Hayes, Seay, Mattern and Mattern on both hospital and industrial high intensity shielding.
- (2) Scott, Scott and Stoutamire on Portsmouth Naval Hospital Linear Accelerator facility.
- (3) Sheretz, Franklin, Crawford, Shaffner on the Roanoke Memorial Hospital's "Cancer Center of Southwest Virginia."
- (4) Middelton, McMillan Architects, Inc., Charlotte, North Carolina, on Bluefield Regional Medical Center's therapy addition for their Siemens Mevatron MD Linear Accelerator and MevaSim Simulator.
- (5) H.D.R., Inc., Architects, Washington, D.C., on Rockingham Memorial Hospital's therapy addition for their Siemens Mevatron MD Linear Accelerator and MevaSim Simulator.

In addition, I have evaluated and tested radiation shielding at dozens of diagnostic facilities in the Eastern United States.

Furthermore, as Physics Department Head at Roanoke College in the early 1970's, I was deeply involved with the layout, radiation shielding design, specification and testing of the Physics Department at Roanoke College, where the students and I constructed a research/teaching accelerator.

BRACHYTHERAPY:

Extensive experience at Roanoke Memorial for many years, and also at Bluefield, with both hand and computer computations. Cs-137, gyn. applications, and I-125 prostate implantations, the latter with Dr. Louis Royster of Roanoke Memorial. Recently, Pd-103 prostate implant.

REFERENCES:

Dr. Robert J. Shalek  
Department of Physics  
M.D. Anderson Hospital  
Texas Medical Center  
6723 Bertner Avenue  
Houston, Texas 77030

Dr. Pat McGinley  
Emory University Clinic  
Department of Radiation Therapy  
1365 Clifton Road, N.E.  
Atlanta, Georgia 30322

Dr. David J. Harter (former Radiation Therapist at  
Director at Roanoke Memorial Hospital)  
Department of Radiation Oncology  
Immanuel Medical Center  
6901 North 72<sup>nd</sup> Street  
Omaha, Nebraska 68122

LANGUAGES: Minimal capabilities in German, French and Russian.



TRAVEL:

1991: France, Italy, Switzerland, Lichtenstein, Austria,  
Hungary, USSR, Estonia, Latvia, Lithuania,  
Poland and Germany

1992: Belgium, Portugal, Spain, Morocco, and France

1996: Austria, Germany, Switzerland and Czech Republic

2000: Japan, India, China, France

2004: Spain, France

2008: Argentina

2012: Scotland



STATE OF WEST VIRGINIA  
DEPARTMENT OF HEALTH AND HUMAN RESOURCES  
ENVIRONMENTAL HEALTH SERVICES  
RADIOLOGICAL HEALTH PROGRAM  
815 QUARRIER STREET, SUITE 418  
CHARLESTON, WV 25301

(304) 558-3526

Gaston Caperton  
Governor

April 23, 1993

Lee S. Anthony, Ph.D., Certified  
Medical Physicist  
Physics Associates  
5346 Peters Creek Road  
Roanoke VA 24019

Dear Dr. Anthony:

Thank you for your prompt response to my letter of April 5, 1993 concerning Mammography Quality Assurance and Testing.

My office has reviewed the information you furnished and are pleased to recognize you as qualified to perform Quality Assurance and Testing for mammographic x-ray units in West Virginia.

If our office can be of any further assistance, please do not hesitate to contact Grady M. Bowyer, R.T. at 815 Quarrier Street, Suite 418, Charleston, WV 25301. Telephone (304) 558-3526 or FAX (304) 558-1289.

Sincerely yours,

Joseph P. Schock, M.P.H., P.E., Director  
Office of Environmental Health Services

JPS:GMB

# COMMONWEALTH OF VIRGINIA

DEPARTMENT OF HEALTH

Office of Radiological Health

*This is to acknowledge that*

**LEE S. ANTHONY, SR., Ph.D.**

License Number: RH-234-99-05

PHYSICS ASSOCIATES

5346 PETERS CREEK ROAD, NW, SUITE A3, ROANOKE, VA 24019

*has been approved to conduct the following type(s) of inspections  
within the Commonwealth of Virginia*

**Diagnostic, Mammography, Non Medical & Shielding Design**

Date Issued: 06/01/17

Expiration Date: 8/1/2020

*Stan D. ...*

Director, Division of X-ray Programs

# NOTICE OF REGISTRATION

**LEE S. ANTHONY, PH.D.**

5346 PETERS CREEK ROAD, N.W.  
ROANOKE, VA 24019

**Registration Number**

**807003**

- ❖ Shielding Design
- ❖ General Health Physics Consultant
- ❖ MQSA Medical Physicist
- ❖ Radiation Machine Evaluation

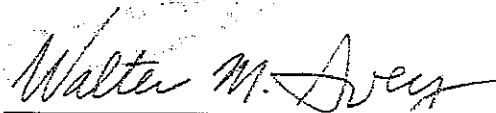
**West Virginia Department of Health and Human Resources  
Bureau for Public Health  
Office of Environmental Health Services  
Radiological Health Program  
[64-CSR-23]**

**1/15/2018**

**Registration Expiration**

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Activities conducted under the authority of this registration must comply with the Radiological Health Rule, West Virginia Code of State Regulations, Title 64, Series 23



Walter M. Ivey, Director  
Office of Environmental Health Services

THIS IS TO CERTIFY THAT

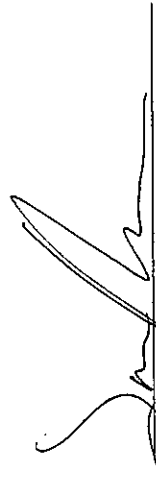
*Lee S. Anthony, Ph.D.*

Has Successfully Completed

*Department of Transportation Hazardous Materials Shipper Training  
in accordance with the training requirements as outlined in  
49 CFR Part 172, Subpart H, and the requirements of Physics  
Associates' Radioactive Materials License*

At: Physics Associates, LLC

Date: November 4, 2013



Jason C. Mace, M.S.  
Physics Associates, LLC; Roanoke, VA

**American Board of Health Physics**

*Be it known that*

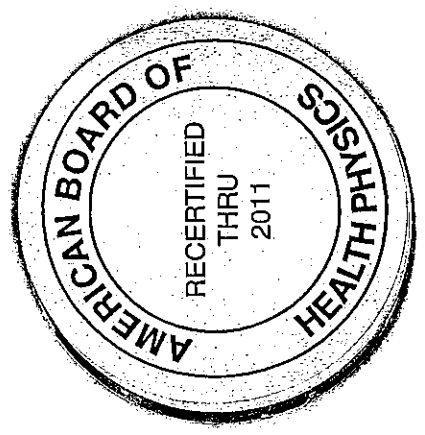
**Lee Saunders Anthony**

*has satisfactorily met the professional standards established by the*

**American Board of Health Physics**

*and is hereby certified in*

**HEALTH PHYSICS**



*Michael D. Towler*  
Chairman

February 1, 1980  
date

*David S. Myers*  
secretary

The American Board of Medical Physics  
**ABMP**

Hereby certifies that

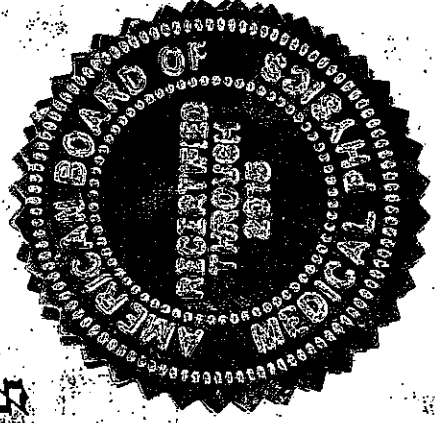
Lee S. Anthony, Ph.D.

has satisfactorily met the professional standards  
and clinical experience requirements  
in medical physics to qualify for

Certification in Medical Physics

with special competence in

Nuclear Medicine Physics



February 16, 1991

Edward S. Stein, Ph.D.

Edward J. Mitchell

# The American Board of Radiology

*Organized through the cooperation of the  
American College of Radiology, the American Roentgen Ray Society,  
the American Radium Society, the Radiological Society of North America,  
the Section on Radiology of the American Medical Association  
and the American Society of Therapeutic Radiologists  
Hereby certifies that*

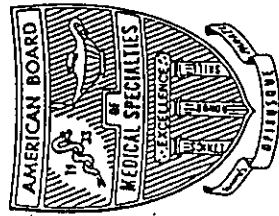
**Lee Saunders Anthony, M.D.**

*Has pursued an accepted course of graduate study  
and clinical work, has met certain standards and qualifications and  
has passed the examinations conducted under the authority of*

*The American Board of Radiology*

*On this fourth day of June, 1932  
Thereby demonstrating to the satisfaction of the Board  
that he is qualified to practice the specialty of*

**Radiological Physics**



*Arvald E. Jacobson, M.D.*  
President

*John H. L. Finkbeiner, M.D.*  
Secretary



# American Board of Health Physics

*Be it known that*

**Lee Saunders Anthony**

*has satisfactorily met the professional standards established by the*

**American Board of Health Physics**

*and is hereby certified in*

**HEALTH PHYSICS**



February 1, 1980

date

chairman

David S. Myers  
secretary

**CABINET FOR HEALTH AND FAMILY SERVICES**

Commonwealth



of Kentucky

EXPIRATION DATE:  
01-31-2018

CERTIFICATE NO:  
03061

RADIATION HEALTH PHYSICIST CONSULTANT

QUALIFICATIONS: AD AT B C D E F G

LEE S ANTHONY PH D  
PHYSICS ASSOCIATES  
5346 PETERS CREEK RD  
ROANOKE VA 24019

Vickie Yates Brown Glisson, Secretary  
Cabinet for Health & Family Services

Acting Director Connie Gayle White, MD.  
Division of Public Health Protection and Safety



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
DIVISION OF RADIOLOGICAL HEALTH

3rd Floor, L & C Annex / 401 Church Street  
Nashville, TN 37243-1532  
Voice (615) 532-0405; FAX (615) 532-0385

CERTIFIED MAIL: 71603901984506369568  
Return Receipt Requested

January 8, 2008

Lee S. Anthony, Ph.D.  
5346 Peters Creek Road  
Roanoke, VA 24019

Dear Dr. Anthony:

Attached to this letter is a copy of the check for payment of your fee to reinstate you as a Registered Inspector. This copy is your receipt, and when combined with this letter, will serve as your Certificate of Registration issued through December 31, 2008. Your authorization is considered effective January 7, 2008.

You have been approved to perform radiation machine inspections for the following Classes of machines as defined in "State Regulations for Protection Against Radiation," 1200-2-10-.24(3):

Class I	Class V
Class II	Class VI
Class III	Class VII
Class IV	

You have been assigned Registered Inspector Number 2029.

Also enclosed are the forms to be completed for each inspection. Please use these as originals to make your own copies. Completed forms are to be provided to the registrant for him to submit to the Department within 60 days of the date of your inspection to qualify them for a reduced fee. The registrant should be advised that any deficiency must be corrected and appropriate documentation of the correction submitted to the Department within 60 days of the date of your inspection.

If we can be of further assistance to you, please contact us.

Sincerely,

Michael Singleton  
Health Physicist  
E-mail: [Michael.Singleton@state.tn.us](mailto:Michael.Singleton@state.tn.us)

Attachments:



Food and Drug Administration  
Rockville MD 20857

AUG 18 1999

Lee S. Anthony, Ph.D.  
Physics Associates  
5346 Peters Creek Road  
Roanoke, Virginia 24019

Dear Dr. Anthony:

After reviewing your credentials, the Division has determined that you meet the requirement as described in the section 900.12(a)(3)(i) of the Final Regulations, effective April 28, 1999.

If you have any further questions on this, please contact Dr. Kish Chakrabarti at 301-594-3332.

Sincerely yours,

*Charles A. Funder, M.D.*  
*for John L. McCrohan* 8/19/99  
John L. McCrohan, Director  
Division of Mammography Quality and  
Radiation Programs, HFZ-240  
Office of Health and Industry Programs  
Center for Devices and Radiological Health

# Virginia Polytechnic Institute

Know all men by these presents

That the Visitors of the Virginia Polytechnic Institute  
have conferred upon

**Type Saunders Anthony**

wha has satisfactorily completed all the requirements, the title and degree of

**Doctor of Philosophy**

**Major—Physics**

with all the rights, privileges and honors everywhere pertaining to this degree.  
In testimony whereof, the undersigned, by authority vested in them, have hereunto affixed their signatures.

Given at the Virginia Polytechnic Institute, Blacksburg, Virginia, on  
this      tenth      day of      June,      in the year of our Lord, one thousand  
nine hundred and sixty-two.



*Way L. Felt*  
Secretary of the Board of Visitors

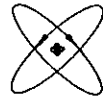
*Louis A. Parker*  
Dean of the Faculty

*Charles S. Kummer*  
President of the College

*James A. Jacobs*  
Dean of the Department

**MEDICAL PHYSICS  
SHIELDING RECOMMENDATIONS**

**RADIATION PHYSICS  
EMERGENCY CONSULTATION**



## **PHYSICS ASSOCIATES**

Lee S. Anthony, Ph.D.  
Certified Health Physicist  
Certified Medical Physicist  
Certified Radiologic Physicist

**5346 Peters Creek Road  
Roanoke, Virginia 24019  
Tel: (540) 563-0165  
Fax: (540) 563-0082**

Robert C. Hudson, M.S.  
Kay A. Saul, B.S.  
Lee S. Anthony, Jr., B.S.;M.A.  
James P. Nunn, B.S.

### **SPECIFIC TRAINING AND EXPERIENCE IN STEROTACTIC BIOPSY SYSTEMS**

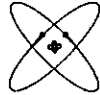
To Whom It May Concern:

As of October 2005, Lee S. Anthony has had 15 hours of training and CME credit in the area of stereotactic biopsy.

Lee S. Anthony has conducted surveys in at least four separate facilities on both Lorad and Fischer stereotactic biopsy units since 1993. (Facility names and equipment surveys are kept on file at Physics Associates' Office in Roanoke, Virginia).

**MEDICAL PHYSICS  
SHIELDING RECOMMENDATIONS**

**RADIATION PHYSICS  
EMERGENCY CONSULTATION**



## **PHYSICS ASSOCIATES**

Lee S. Anthony, Ph.D.  
Certified Health Physicist  
Certified Medical Physicist  
Certified Radiologic Physicist

**5346 Peters Creek Road  
Roanoke, Virginia 24019  
Tel: (540) 563-0165  
Fax: (540) 563-0082**

Robert C. Hudson, M.S.  
Kay A. Saul, B.S.  
Lee S. Anthony, Jr., B.S.;M.A.  
James P. Nunn, B.S.

### **MAMMOGRAPHY SURVEY DATA FOR LEE S. ANTHONY, Ph.D.**

To Whom it May Concern:

I first started surveys on medical x-ray machines in 1963. As of October 1, 2005, I have surveyed approximately 75 different mammography machines at 41 different facilities. 14 different manufacturers were represented in the 75 mammography machines surveyed. The above data can be documented by the files kept in Physics Associates' office in Roanoke, Virginia.

Lee S. Anthony, Ph.D.  
C.H.P.; C.M.P.; C.R.P.

LSA/kas

**TRAINING AND EXPERIENCE OF LEE S. ANTHONY IN DIGITAL  
MAMMOGRAPHY**

<u>Hours</u>	<u>Date</u>	<u>Title</u>
1	June 24, 1995	<b>Lecture by Martin Yaffe on Digital Mammography</b>
2.75	Sept. 20 & 21, 1996	Session #4 of Mammography and MQSA: The Physicists Role. Entitled: Full Field Digital Mammography
1	Sept. 20 & 21, 1996	<b>Survey Workshop on Digital Stereotactic Mammography Unit</b>
1	Sept. 24 & 25, 1999	Overview of Dectector Technologies and Acceptance Testing and Q.A. Control
0.75	Sept. 24 & 25, 1999	<b>Clinic Motivation for Digital Mammography</b>
0.75	Sept. 24 & 25, 1999	New Techniques Utilizing Digital Technology
0.5	Sept. 24 & 25, 1999	<b>Digital Mammography Workstation Designs</b>
0.25	Sept. 24 & 25, 1999	Stereotactic Breast Biopsy: Imaging Geometry, Detector Design, Advance in Reconstruction
1	Sept. 24 & 25, 1999	<b>Physics Testing of Stereotactic Mammography Equipment</b>
6.0	May 9-10, 2002	The 6 <sup>th</sup> Annual Seminar on the Physics of Mammography
12.0	August 23 & 24, 2002	<b>The Physics of Mammography "Hands-On Workshop for Surveying Digital Mammography Units</b>
7.0	October 2-3, 2004	The Physics of Mammography 2004
9.0	October 6, 2006	<b>Selenia Installation and Acceptance Training for Digital Mammography Units.</b>



8.0	March 16, 2007	Selenia Installation and Acceptance Testing by Hologic
6.75	<b>October 9-10, 2009</b>	<b>13<sup>th</sup> Annual Mammography Update For Physicists by MTMI</b>

# Continuing Education in Mammography

ANTHONY  
Last name

LEE  
First name

S.  
MI

Ph.D.  
Degree

Date Prepared: June 13, 2002

**Instructions:**

Continuing education activities may be documented by using this form or another of your choice.  
List each continuing education activity below, indicating dates, other descriptive information and the number of hours specific to mammography.

**Formal Programs:** Specify the program title, location, dates attended and the number of hours specific to mammography. Indicate if the formal program is approved for AMA Category 1 credit hours by an organization accredited by the Accreditation Council for Continuing Medical Education (ACCME).

**Informal Activities:** Study of medical literature: Journals: specify title of journal article, journal name, issue. Textbooks: specify book title, author. Teaching mammography related services: Indicate type of education, subject, institution, date of program, preparation time for lectures or teaching. Preparation and publication of scientific papers: Specify number of hours involved in preparing the articles. Presentation of exhibits of medical associations or groups: Specify preparation time as an exhibitor. Other self-directed learning: Describe activity, indicating dates and other appropriate information.

Program Title/Activity	Description	Location	Dates (M & Y)	Hours Specific to Mammography	Formal Program Only Approved for AMA Category 1 Credits (Yes or No)
25th National Conference on Breast Cancer		Boston, Massachusetts	4/92	18	Yes
AAPM Screening - Mammography Symposium		Acapulco, Mexico	10/93	9	Yes
Professional Viewing of ACR Video: The Art of Positioning: Level I - Basic Positioning			5/94	1	No
Mammography and MQSA: The Physicist's Role - State University of New York At Buffalo, Amherst, New York			6/95	9.5	Yes
Professional Viewing of Nuclear Associates Video: "Processing Quality Control" Reading of Kodak Publications: 1. "Artifacts in Mammography" 2. "Identifying and Correcting Processing Artifacts"			9/95	3	
Professional Viewing and Discussion of Nuclear Associates Video: "Quality Assurance in Screen-Film Mammography"			10/95	1.5	No
Instrumentarium Information & Video of the Alpha R.T. & Eklund Positioning System			4/96	1	

# Continuing Education in Mammography

page 2

ANTHONY, SR.

LEE

A.

Ph.D.

Last name

First name

MI

Degree

Date Prepared: \_\_\_\_\_

**Instructions:** Continuing education activities may be documented by using this form or another of your choice.  
List each continuing education activity below, indicating dates, other descriptive information and the number of hours specific to mammography.

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Program Title/Activity	Description	Location	Dates (M & Y)	Hours Specific to Mammography	Formal Program Only Approved for AMA Category 1 Credits (Yes or No)
"Emerging Issues in Mammography"	Sponsored by the University of Virginia and AAPM at College of Radiology *As of this date: 15 hrs. digital 1998* 8 hrs. stereo	Charlottesville, Virginia	9/20 & 21 1996	12	Yes
"Breast Imaging Weekend Review Course"	Sponsored by the North Carolina Chapter - American College of Radiology *As of this date: 15 hrs. digital 1998* 8 hrs. stereo	American College of Radiology	1/16-18 1998*	15.5	Yes
"Emerging Issues in Mammography"	Sponsored by the University of Virginia School of Medicine	University of Virginia School of Medicine	9/24-25 1999	15 4.25 digital 1.0 stereo	Yes
"The 19th Annual Pittsburgh Breast Imaging Seminar"	Sponsored by the Pittsburgh Mercy Health System and Pittsburgh Breast Imaging Seminar Associates	Pittsburgh Mercy Health System and Pittsburgh Breast Imaging Seminar Associates	10/28-31 1999	15 3.5 digital 1.5 stereo	Yes
"The 20th Annual Pittsburgh Breast Imaging"	Sponsored by the Western Pennsylvania Hospital and Pittsburgh Breast Imaging Seminar Associates	Western Pennsylvania Hospital and Pittsburgh Breast Imaging Seminar Associates	5/9-10 2000	15 5.75 stereo 2.25 digital	Yes
"The Physics of Mammography"	Sponsored by the Medical Technology Management Institute/Medical College of Wisconsin, Milwaukee	Medical Technology Management Institute/Medical College of Wisconsin, Milwaukee	5/9-10 2002	15 6.0 digital 3.0 stereo	Yes

# Continuing Education in Mammography

ANTHONY, SR.      LEE      S.      Ph.D.  
 Last name      First name      MI      Degree  
 Date prepared:      May 20, 2011  
 Office Use  
 MAP ID No.  
 Page 3

**Instructions:** Continuing education activities may be documented by using this form or another of your choice. List each continuing education activity below, indicating dates, other descriptive information and the number of hours specific to mammography.

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Program Title/Activity	Description	Location	Dates (MM/YY)	Hours Specific to Mammography	Formal Program Only Approved for AMA Category 1 credit? Yes - No	Other Use
"Hands-On Workshop for Surveying Digital Mammography units"	Sponsored by the Medical Technology Management Institute (MTMI) at the Nat'l Naval Medical Center, Bethesda, MD		8/23-24 2002	12 hrs. total 12 hrs. digital	Yes	
"Selenium Installation and Acceptance Testing"	Sponsored by Hologic.		10/6/06	9 hrs. digital	Yes	
"Selenium Installation and Acceptance Testing"	Sponsored by Hologic.		3/16/07	8 hrs. digital	Yes	
13th Annual Mammography Update for Physicians	Sponsored by MTMI		October 9-10 2009	15.5 hrs. total 3 hrs. surveying stereotactic breast biopsy unit 6.75 hrs. digital		

THIS IS TO CERTIFY THAT

*Lee S. Anthony, Ph.D.*

Has Successfully Completed

*Department of Transportation Hazardous Materials Shipper Training  
in accordance with the training requirements as outlined in  
49 CFR Part 172, Subpart H, and the requirements of Physics  
Associates' USNRC Radioactive Materials License*

At: Physics Associates, Roanoke, VA

Date: August 4, 2010



Greg Hodges, Ph.D.  
Physics Associates; Roanoke, VA