

**CURRICULUM VITAE**  
**John R. Haaga, M.D.**  
4309 North Hilltop Drive  
Chagrin Falls, Ohio 44022

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**ADMINISTRATIVE OFFICE:** University Hospitals of Cleveland  
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**PERSONAL DATA**

BIRTH DATE: July 6, 1945 - Troy, Ohio  
MARITAL STATUS: Married, Ellen Sturm, October 1968, Solon, Ohio  
CHILDREN: Elizabeth, 8/19/72-12/8/85 (deceased); Matthew, 2/8/76; Timothy,  
12/30/80; Rebecca, 2/14/85

**EDUCATION**

1973-1976 Radiology Resident, Cleveland Clinic Foundation, Cleveland, Ohio  
1971-1973 Military Service, United States Air Force  
1970-1971 Internship, Columbus Children's Hospital, Columbus, Ohio  
1966-1970 M.D. (Cum Laude), Ohio State University, Columbus, Ohio.  
Honors: Alpha Omega Alpha  
1962-1967 B.A. (Cum Laude), Ohio State University, Columbus, Ohio.  
Honors: Phi Beta Kappa

**MILITARY SERVICE**

1971-1973 United States Air Force, Medical Corps, Captain

**CURRENT PROFESSIONAL APPOINTMENTS**

1993-May, 2005 Director and Chairman, Department of Radiology, University  
Hospitals/Case Western Reserve University, Cleveland, Ohio  
1991-May, 2005 President, University Radiologists of Cleveland, Inc., Cleveland,  
Ohio  
1984-present Medical Director of University Suburban Health Center, Scanning  
Department, S. Euclid, Ohio  
1981-present Professor of Radiology, Case Western Reserve Univ., Cleveland, Ohio  
1980-present Director, Division of Diagnostic Radiology  
1979-present Section Head, Computed Body Tomography Section,  
University Hospitals, Cleveland, Ohio

**CURRENT ACADEMIC APPOINTMENTS**

1996-present Castele Professor of Radiology, Case Western Reserve University,  
Cleveland, Ohio  
1996-present Director, Center for Automated Human Identification, Cleveland, Ohio  
1993-May 2005 Chairman, Department of Radiology, Case Western Reserve University,  
Cleveland, Ohio  
1987-present Surveyor, Council for Graduate Medical Education Association  
1981-present Professor of Radiology, Case Western Reserve University, Cleveland,  
Ohio

**PREVIOUS ACADEMIC & PROFESSIONAL APPOINTMENTS**

1991-1993	Acting Director and Chairman, Department of Radiology, University Hospitals/Case Western Reserve University, Cleveland, Ohio
1980-1991	Vice Chairman, Department of Radiology, University Hospitals, Cleveland, Ohio
1982-1985	Section Head, Nuclear Magnetic Resonance, University Hospitals, Cleveland, Ohio
1984	Board Examiner, American Board of Radiology
1979-1981	Associate Professor of Radiology, Case Western Reserve University, Cleveland, Ohio
1976-1979	Staff Radiologist, Cleveland Clinic Foundation, Cleveland, Ohio
1976	Chief Resident, Cleveland Clinic Foundation, Cleveland, Ohio

**BOARD CERTIFICATION**

American Board of Radiology [1977]  
Ohio State Medical Board [1970]  
Fellow, American College of Radiology [1986]

**LICENSURE**      Ohio

**JOURNAL REVIEWER**

American Journal of Roentgenology  
Annals of Internal Medicine  
Applied Radiology  
Chest  
Journal of Computed Tomography  
Radiology  
Clinical Imaging  
Journal of Vascular and Interventional Radiology

**SOCIETY MEMBERSHIP**

NATIONAL:

Biliary Radiological Society [1988-present]  
Society of Cardiovascular & Interventional Radiology [1986-present]  
American Roentgen Ray Society [1983-present]  
Radiological Society of North America [1982-present]  
Society of Gastrointestinal Radiologists [1982-present]  
Society of Computed Body Tomography [1978-present]  
American College of Radiology [1978-present]  
American Medical Association [1978-present]

REGIONAL:

Cleveland Academy of Medicine [1978-present]  
Cleveland Radiological Society [1978-present]

**COMMITTEE APPOINTMENTS**

NATIONAL:

ARRS Executive Council - Scientific Exhibits Committee, chairman [1994-2005t]  
ACR Subcommittee on NMR Clinical Indications [1985-1987]  
Refresher Course Committee, Radiological Society of North America [1986-1995]  
Technical Exhibits Committee, Radiological Society of North America [1984-2004]  
President, Society of Computed Body Tomography [1984-1985]  
Executive Board, Society of Computed Body Tomography [1983-1984]  
Program and Credential Committee, Society of Computed Body Tomography [1979-1980]

**COMMITTEE APPOINTMENTS (CONT.)**

NATIONAL INSTITUTE OF HEALTH:

Chairman, Supplemental Review, National Collaborative Diagnostic Imaging Trials [1989]  
Chairman, Special Review Committee: National Collaborative Diagnostic Imaging Trials [1988]  
Consensus Development Conference on MRI [1987]  
DRG NMR Basic Research [1984]

STATE:

Developmental Task Force, State of Ohio Department of Health New Technologies CON Criteria [1983-1984]

REGIONAL:

President, Cleveland Radiological Society [1988-1989]

DEPARTMENTAL AND INSTITUTIONAL COMMITTEES:

Minority Faculty Development Committee of the Clinical Council (1997-2005)  
Search Committee for Director of Radiation Oncology (1996)  
Search Committee for Associate Dean of Biomedical Information Technologies (1996)  
Performance Improvement Council (1995-present)  
University Faculty Practice Association, Executive Committee (1995-2005)  
University Faculty Practice Association, Finance Committee (1995-2005)  
Clinical Leadership Committee for External Planning [1994-present]  
Clinical Program Evaluation Task Force, University Hospitals [1993-present]  
Faculty Health Services Organization - Revenue Distribution Task Force, University Hospitals [1993-present]  
MEDNET Integration Committee [1993-1995]  
Pediatric Radiology Services Task Force [1993-present]  
Clinical Trials & Patient-Based Studies Committee, Case Western Reserve University & Henry Ford Health Systems Collaboration Committees [1992-present]  
Chairman, Radiology Research Committee [1991]  
Radiology Departmental Committee on Appointments, Promotions and Tenure [1991-present]  
Clinical Department Directors, University Hospitals [1991-2005]  
Council of Clinical Chairmen, Case Western Reserve University [1991-2005]  
Executive Committee, Case Western Reserve University [1991-2005]  
Medical Council, University Hospitals [1991-present]  
VA Dean's Committee [1991-present]  
Committee on Medical Education [1991-present]  
Radiology Department Committee on Equity in Professional Affairs, Case Western Reserve University [1991-present]  
Radiology Department Committee on Appointments, Promotion and Tenure, Case Western Reserve University [1991-present]  
QualChoice Policy Committee, University Hospitals [1991]  
Committee on Appointments, Promotion and Tenure, Case Western Reserve University [1987-1990, 1993-present]  
Co-Chairman, Radiology Quality Improvement Committee [1986-present]  
Chairman - Five Year Internal Review Committee [1986]  
Radiology Research Committee [1984-present]  
Board of Directors, University Radiologists of Cleveland [1983-2005]  
Radiology Education Committee [1982-present]

**TEACHING ACTIVITIES**

PHASE THREE - Optional Clerkships: Radiology Elective (65 hours/year)  
GRADUATE (HOUSE STAFF) MEDICAL EDUCATION  
Inpatient Attending Activities (250 hours/year)  
Special Lectures/Seminars/Conferences (10 hours/year)

#### **CURRENT RESEARCH PROJECTS AND PATENT DISCLOSURE**

Imaging Reconstruction of Forensic Samples  
Urokinase Enhancement of PAD  
New Chest Valve for Pneumothoraces  
Hemostatic Biopsy Sheath  
Use of CO<sub>2</sub> for Arterial Contrast Agent  
Gelatin Coated Needle for Prevention of Pneumothorax  
Evaluation of Liver Transplant Rejection by Glucagon Vascular Enhancement  
Neon Gas as an MR Contrast Agent  
CT Biopsy Guidance Software  
Phase II Study of Topotecan in Patients with Advanced Colorectal Carcinoma  
Phase II Study of CPT-11 in Patients with Advanced Colorectal Carcinoma  
Buthionine Sulfoximine (BSO) and Melphalan: A Biochemical Modulation Trial Based Upon Depletion of Glutathione by BSO  
Phase II Study of Topotecan for Advanced Ovarian Carcinoma  
Phase I Trial of O<sup>6</sup> Benzylguanine and BCNU. A Biochemical Modulation Trial Based Upon Depletion of O<sup>6</sup>- Alkylguanine DNA Alkyltransferase Directed DNA Repair.  
Modulation of O<sup>6</sup>- Alkylguanine Alkyltransferase Directed DNA Repair in Metastatic Colon Cancers  
Patent with CWRU: Bimodal Therapy for Tumor Treatment using Radiofrequency and Chemotherapy Laden Polymers (under disclosure by Boston Scientific Corporation)  
Patent with CWRU: New Drug Application for Carbonic Anhydrase, to differentiate neoplasm from benign tissue (considered for commercial development by Galleon Pharmaceuticals)  
Patent with CWRU: Two step method for Decontamination of Anthrax Spores (considered for commercial development by Go-Jo and Galleon Pharmaceuticals)  
Patent with CWRU: Nanobot Treatment of Tumors by Heat Induction  
Patent declined by CWRU Tech Transfer for development: Light Probe for evaluation of tumor molecular character by light fluorescence/PET analysis (being evaluated by venture capitalists)

#### *Major Clinical Projects having significant impact*

1. Prevention of bleeding in coagulopathic patients by local injection of blood elements (LIBE) – Under current IRB  
The Transfusion of Medicine/Hemostasis Clinical Trials Network estimates 30% of the nations blood supply is sconsumed for prophylactice treatment of bleeding inconjunction with minimally invasive or image guided microsurgery. Our new method of local injection in lieu of systemic correction has proven effective in retrospective study of 33 patients. This new local treatment will be used in lieu of systemic treatment at our institution as part of the above trial.
2. Use TPA as catheter irrigant for percutaneous abscess drainage. – funded by Genentech for pilot study, under current IRB.  
The current study TPA as a catheter irrigant for percutaneous abscess drainage is based on the basic physiology of abscesses and previous studies which used urokinase as a catheter irrigant.

#### **ORIGINAL INNOVATIONS**

Longitudinal Scan-Topogram ScoutView, 1976 (Publication #11)  
Biopsy Needle - Cook Corporation  
Hemostatic Biopsy Sheath  
One Step Chest Tube  
Vacutainer Biopsy Device  
"Just in time patient transport"

U.S. patents - 7 issued

**Current Extramural support**

Research Scholar Grant for Beginning Investigator (Gao)	1-01-12/04 \$640,712	5%
Image-Guided Local Drug Delivery for the Treatment of Liver Tumors		
1R01-CA-90696 (Gao-bimedical) 5%	5/02-4/06	
NIH/NCI	\$225,000	
Interstitial drug delivery to thermoablated liver tumors.		
:		
IR21-CA-093993 (Gao-biomed)	2/02-1/04	5%
NIH/NCI	\$125,000	
Computed tomography: In vivo measure of platinum-containing drugs.		
1R01-CA-095307-01A1 (Lee-radiol)	7/03-6/07	15%
NIH/NCI	\$240,777	
Quantitative FDG-PET for imaging woodchuck HCC.		
(RFP N01-CM-07003-74) (Remick)	11/00-10/05	10%
NCI	\$1,340,721 (total direct costs)	
CPF-CTC Early Therapeutics - Development with Phase II Emphasis (Contract)		
HL075077-01	10/01/03-09/30/08	2%
Effects of Sleep Apnea Treatment on Metabolic Syndrome		
NIH/NHLBI	\$1,486,964 (Redline, Pediatrics)	
SKI-606 Phase I Tissue Biopsy Procedures, Sample Handling ( Krishnamurthi) Wyeth, co-investigator IN PROCESS		

**MAJOR WORKS**

Interventional Radiology - C.V. Mosby, St. Louis, MO, 1989.  
CT and MRI of the Whole Body (3rd edition) - C.V. Mosby, St. Louis, MO, 1994.  
CT and MRI of the Whole Body (4<sup>th</sup> edition)- C.V. Mosby St. Louis , MO, 2003 ( according to parent company Elsevier, most widely sold Radiology text).  
CT and MRI of the Whole Body (5<sup>th</sup> edition).

**PUBLICATIONS/BOOKS**

1. Alfidi RJ, **Haaga JR**, Weinstein M, Degrott J, eds. *Computed tomography of the human body: an atlas of normal anatomy*. St. Louis: The C.V. Mosby Company, 1977.
2. **Haaga JR**, Reich N, eds. *Computed tomography of abdominal abnormalities*. St. Louis: The C.V. Mosby Company, 1978.
3. **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. St. Louis: The C.V. Mosby Company, 1983.
4. Alfidi RJ, **Haaga JR**, eds. Symposium on magnetic resonance imaging. In: *The radiologic clinics of North America*. Philadelphia: W.B. Saunders Company, 1984.

5. **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the brain, head and neck*. St. Louis: The C.V. Mosby Company, 1985.

**PUBLICATIONS/BOOKS (CONT.)**

6. **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985.
7. **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. 2nd edition. St. Louis: The C.V. Mosby Company, 1988.
8. **Haaga JR**, Lanzieri CF, Sartoris D, Zerhouni E, eds. *Computed tomography and magnetic resonance imaging of the whole body*, 3rd edition. St. Louis: The C.V. Mosby Company. 1994.
9. Hoffman D, Gazelle GS, Seftel AD, **Haaga JR**, Resnick M. *Atlas of urologic imaging*. Baltimore: Williams and Wilkins, 1995.
10. **Haaga JR**, Lanzieri CF, Gilkeson RC, eds. *CT and MR Imaging of the Whole Body*. 4<sup>th</sup> Edition. The .V. Mosby Company, 2003.
11. **Haaga JR**, Nakamoto DA, *Radiologic Clinics of North America* Volume 43- Number 6- November 2005.

**PUBLICATIONS/BOOK CHAPTERS**

1. Schultz CL, **Haaga JR**. Computerized tomography. In: Sigel and Bernard, eds. *Surgical diagnosis: principles of patient studies*. Philadelphia: Lea & Febiger.
2. Alfidi RJ, **Haaga JR**. Computed tomography. In: Bockus HL, ed. *Gastroenterology*. Philadelphia: W. B. Saunders Company, 1977.
3. **Haaga JR**, Alfidi RJ. CT of the abdomen and aorta. In: Potchen EJ, ed. *Current concepts in radiology*. St. Louis: The C.V. Mosby Company, 1977.
4. **Haaga JR**, Alfidi RJ. Diagnostic procedures - computed tomography. In: Cooperman AM, Hoerr SO, eds. *Surgery of the pancreas*. St. Louis: The C.V. Mosby Company, 1978; pg. 40-71.
5. **Haaga JR**, Alfidi RJ. Interventional CT. In: Margulis A, Burhenne S, eds. *Alimentary tract roentgenology, III*. St. Louis: The C.V. Mosby Company, 1978.
6. Cooperman AM, **Haaga JR**, Reich N, Alfidi RJ. Computed tomography: an aid to the abdominal surgeon. In: Nyhhus LM, ed. *Surgery annual*. New York: Appleton Century Croft, 1978.
7. **Haaga JR**, Alfidi RJ, Shuck JM. Diagnosis of intraabdominal disease by computerized axial tomography. In: Jirsh DW, ed. *Frontiers in general surgery*. Lancaster, England: Falcon House, MTP Press Ltd., 1982, Chap. 2, pg. 41-83.
8. Solomon EH, **Haaga JR**. The mediastinum. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 1. St. Louis: The C.V. Mosby Company, 1983; pg. 430-492.
9. Cohen AM, **Haaga JR**, Alfidi RJ. The lungs. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 16, pg. 513-574.
10. **Haaga JR**, Alfidi RJ, Ament A. The biliary system. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C. V. Mosby Company, 1983; Chap. 19, pg. 619-638.

11. **Haaga JR**. The pancreas. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 20, pg. 639-680.
12. LiPuma JP, **Haaga JR**. The kidney. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 22, pg. 706-752.

#### PUBLICATIONS/BOOK CHAPTERS

13. **Haaga JR**, Alfidi RJ. Peritoneal abscesses and other disorders. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 26, pg. 835-866.
14. **Haaga JR**, Alfidi RJ. CT-guided procedures. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 27, pg. 867-933.
15. Balsara VJ, **Haaga JR**. The gastrointestinal tract. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 30, pg. 965-1001.
16. **Haaga JR**, Patel S. Further experience with vascular problems. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 31, sect. VI, pg. 1023-1034.
17. **Haaga JR**, Alfidi RJ. Clinical NMR. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. Vol. 2. St. Louis: The C.V. Mosby Company, 1983; Chap. 31, sect. IX, pg. 1053-1069.
18. Martino CR, **Haaga JR**. Percutaneous biopsy of the liver. In: Wallace S, Charnsangavej C, Carrasco CH, eds. *Seminars in interventional radiology*. Houston: The University of Texas System Cancer Center, 1984.
19. **Haaga JR**. MRI of the abdomen and pelvis. In: Ferrucci JT, ed. *Radiology - diagnosis/imaging intervention*. Philadelphia: J. B. Lippincott Company, 1985.
20. **Haaga JR**. Computerized tomography in the evaluation of lung disease. In: Nochomovitz ML, Cherniack NS, eds. *Non-invasive assessment and monitoring of the respiratory system*. New York: Churchill Livingstone, Inc., 1985.
21. **Haaga JR**, Alfidi RJ. Clinical NMR. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the brain, head and neck*. St. Louis: The C.V. Mosby Company, 1985; Chap. 14, sect. V, pg. 459-475.
22. **Haaga JR**, Alfidi RJ, Ament A. The biliary system. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 3, pg. 45-64.
23. **Haaga JR**. The pancreas. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 4, pg. 65-106.
24. LiPuma JP, **Haaga JR**. The kidney. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 6, pg. 132-178.
25. **Haaga JR**, Alfidi RJ. Peritoneal abscesses and other disorders. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 10, pg. 261-292.

26. **Haaga JR.** CT-guided procedures. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 11, pg. 293-359.
27. Balsara VJ, **Haaga JR.** The gastrointestinal tract. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 11, pg. 293-359.

#### PUBLICATIONS/BOOK CHAPTERS (CONT.)

28. **Haaga JR**, Patel S. Further experience with vascular problems. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 13, sect. I, pg. 397-408.
29. **Haaga JR**, Alfidi RJ. Clinical NMR. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the abdomen*. St. Louis: The C.V. Mosby Company, 1985; Chap. 13, sect. IV, pg. 427-443.
30. Andriole JG, **Haaga JR**, Hau T. Percutaneous drainage of intraabdominal abscess: an alternative to re-exploration. In: Fry DE, ed. *Reoperative surgery of the abdomen*. New York: Mercel Dekka, Inc. 1986, chap. 19, pg. 369-385.
31. **Haaga JR.** The pancreas. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. 2nd edition, Vol. 1. St. Louis: The C.V. Mosby Company, 1988; Chap. 24, pg. 905-907.
32. **Haaga JR.** The peritoneum and mesentery. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. 2nd edition, Vol. 2. St. Louis: The C.V. Mosby Company, 1988; Chap. 29, pg. 1137-1199.
33. **Haaga JR.** CT-guided procedures. In: **Haaga JR**, Alfidi RJ, eds. *Computed tomography of the whole body*. 2nd edition, Vol. 2. St. Louis: The C.V. Mosby Company, 1988; Chap. 30, pg. 1200-1320.
34. Knelson M, **Haaga JR.** Percutaneous guided biopsies of abdominal lesions. In: Athanasoulis CA, ed. *Interventional radiology*. Philadelphia: W. B. Saunders Company, 1988.
35. **Haaga JR.** The pancreas. In: **Haaga JR**, Lanzieri CF, Sartoris DJ, Zerhouni EA, eds. *Computed tomography and magnetic resonance imaging of the whole body*. 3rd edition. St. Louis: C. V. Mosby Company, 1994.
36. **Haaga JR.** The peritoneum and mesentery. In: **Haaga JR**, Lanzieri CF, Sartoris DJ, Zerhouni EA, eds. *Computed tomography and magnetic resonance imaging of the whole body*. 3rd edition. St. Louis: C. V. Mosby Company, 1994.
37. **Haaga JR.** Interventional CT-guided procedures. In: *Computed tomography and magnetic resonance imaging of the whole body*. 3rd edition. St. Louis: C. V. Mosby Company, 1994.
38. Nakamoto DA, **Haaga JR.** Management of intrathoracic fluid collections. In: Matsumoto AH, ed. *Noncardiac thoracic interventions*. New York: Igaku-Shoin Medical Publishers, 1995.
39. **Haaga JR**, Nakamoto DA, Burner K. Lung, mediastinal, hilar and pleural biopsies. In: Matsumoto AH, ed. *Noncardiac thoracic interventions*. New York: Igaku-Shoin Medical Publishers, 1995.
40. Bellavia R, **Haaga JR.** Liver biopsy. In: Gazelle GS, Mueller PR, Saini S, eds. *Hepatobiliary imaging*. New York: Thieme Medical Publishers (in press).
41. Bellevia R, **Haaga JR.** Percutaneous biopsy of the pancreas. In: Gazelle GS, Mueller PR, Saini

S, eds. *Hepatobiliary imaging*. New York: Thieme Medical Publishers (in press).

42. Dutta D, **Haaga JR**. Computed tomography in urologic disease: a practical guide to the uses and limitations of CT scanning. In: Resnick MI, Older RA, eds. *Diagnosis of Genitourinary Disease*, 2nd edition. New York: Thieme Medical Publishers, Inc., 1997.
43. **Haaga JR**. Overview of biopsy technique and biopsy needles. In: *Thoracic and visceral nonvascular interventions/genitorurinary interventions*. SCVIR Syllabus. The Society of Cardiovascular & Interventional Radiology, 1997;1-7.

#### **PUBLICATIONS/BOOK CHAPTERS (CONT.)**

44. **Haaga JR** The gallbladder and Biliary Tract In: *CT and MR Imaging of the Whole Body*. 4<sup>th</sup> edition. St. Louis: Mosby Co., 2003
45. **Haaga JR** The Pancreas. In: *Ct and MR Imaging of the Whole Body*. 4<sup>th</sup> edition. St. Louis: Mosby Co. 2003
46. **Haaga JR** Peritoneum and Mesentery: In: *CT and MR Imaging of the Whole Body*. 4<sup>th</sup> edition. St. Louis: Mosby Co., 2003
47. **Haaga JR** Image-Guided Micro procedures. In: *CT and MR Imaging of the Whole Body*. 4<sup>th</sup> edition. St. Louis: Mosby Co. 2003
48. **Haaga JR** CT and MR Interventional Procedure. In: *CT and MR Imaging of the Whole Body*. 4<sup>th</sup> edition. St. Louis: Mosby Co. 2003
49. Nakamoto DA, **Haaga JR**. Emergent Ultrasound Interventions. In: *Radiologic Clinics of North America*. Elsevier Saunders. 2004.

#### **ELECTRONIC PUBLICATIONS**

1. **Haaga JR**. Indications for biopsy needle techniques. SCVIR Educational CD-Rom (in press).

1. Alfidi RJ, **Haaga JR**, Meaney TF, et al. Computed tomography of the thorax and abdomen: a preliminary report. *Radiology* 1975; 117(2):257-264.
2. **Haaga JR**, Alfidi RJ. Precise biopsy localization by computed tomography. *Radiology* 1976; 118(3):603-607.
3. **Haaga JR**, Alfidi RJ. CT scanning of the pancreas. *J Belge Radiol* 1976; 59(3):281-286.
4. Alfidi RJ, MacIntyre WJ, **Haaga JR**. Effects of biological motion on CT resolution. *AJR* 1976; 127:11-15.
5. Alfidi RJ, **Haaga JR**, Havrilla TR, Pepe RG, Cook SA. Computed tomography of the liver. *AJR* 1976; 127:69-74.
6. Jelden GL, Chernak ES, Antunez AR, **Haaga JR**, Lavik PS, Dhaligal R. Further progress in CT scanning and computerized radiation therapy treatment planning. *AJR* 1976; 127:179-185.
7. MacIntyre WJ, Alfidi RJ, **Haaga JR**, Chernak E, Meaney TF. Comparative modulation transfer functions of EMI and delta scanner. *Radiology* 1976; 120(1):189-191.
8. **Haaga JR**, Alfidi RJ, Cooperman AM, Havrilla TR, Meaney TF. Definitive treatment of a large pyogenic liver abscess with CT guidance. *Cleve Clin Quarterly* 1976; 43(2):85-88.
9. Alfidi RJ, **Haaga JR**. Computed tomography: a new horizon. *Postgrad Med* 1976; 60(2).
10. **Haaga JR**, Alfidi RJ, Zelch MG, et al. Computed tomography of the pancreas. *Radiology* 1976; 120:589-595.
11. **Haaga JR**, Alfidi RJ, MacIntyre WJ, Havrilla TR, Meaney TF. CT longitudinal scan. *AJR* 1976; 127:1059-1060.
12. Alfidi RJ, **Haaga JR**. Computed body tomography. *Radiol Clin North Am* 1976; XIV(3):563-570.
13. Cooperman AM, **Haaga JR**, Steiger E, Hermann R. Computed tomography: a valuable aid to the abdominal surgeon. *Am J Surg* 1977; 133:121-126.
14. **Haaga JR**, Alfidi RJ, Havrilla TR, et al. CT detection and aspiration of abdominal abscess. *AJR* 1977; 128:465-474.
15. Alfidi RJ, **Haaga JR**, MacIntyre WJ, Bacon RT, Ferrario CM. Gated computed tomography of the heart. *Comput Axial Tomogr* 1977; 1:551-555.
16. **Haaga JR**, Zelch MG, Alfidi RJ. CT-guided antegrade pyelography and percutaneous nephrostomy. *AJR* 1977; 128:621-624.
17. Havrilla TR, **Haaga JR**, Alfidi RJ, Reich NE. Computed tomography and obstructive biliary disease. *AJR* 1977; 128:765-768.
18. Havrilla TR, Pepe RG, Alfidi RJ, **Haaga JR**. Benign hepatic tumors and cysts in women using oral contraceptive agents: computed tomography as a diagnostic aid. *Cleve Clin Quarterly* 1977; 44(1):41-47.
19. **Haaga JR**, Reich NE, Havrilla TR, Alfidi RJ, Meaney TF. CT-guided biopsy. *Cleve Clin Quarterly* 1977; 44(1):27-33.
20. Reich NE, **Haaga JR**, Cooperman AM, Seiss A. Computed tomography guided percutaneous

transhepatic biliary drainage. Comput Axial Tomogr 1977; 1(2):111-113.

**PUBLICATIONS/JOURNALS (CONT.)**

21. Havrilla TR, Reich NE, **Haaga JR**. The floating aorta in computerized tomography: a sign of retroperitoneal pathology. Comput Axial Tomogr 1977; 1(2):107-110.
22. Reich NE, **Haaga JR**. Current cases and concepts: intra-splenic hematoma. Comput Axial Tomogr 1977; 1(3):227-230.
23. Havrilla TR, **Haaga JR**, Reich NE, Seidemann FE. Pseudocyst of the pancreas with perirenal extension. Comput Axial Tomogr 1977; 1(3):199-204.
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#### **LECTURES/MEETINGS**

**1976** CT Symposium - 75th Anniversary Dutch Radiologic Society, Utrecht, Holland. June, 1976.

- a. "CT detection and aspiration of abdominal abscesses."
- b. "Comparison of CT and ultrasound."

University of Tübingen, Germany. June, 1976.

- a. "CT detection and aspiration of abdominal abscesses."
- b. "CT scanning of the pancreas."
- c. "CT guided biopsy procedures."

University of Heidelberg, Germany. June, 1976.

- a. "CT detection and aspiration of abdominal abscess."
- b. "CT scanning of the pancreas."
- c. "CT guided biopsy procedure."

University of Berlin, Germany. June, 1976.

- a. "CT detection and aspiration of abdominal abscess."
- b. "CT scanning of the pancreas."

- c. "CT guided biopsy procedure."

University of Munich, Germany. June, 1976.

- a. "CT detection and aspiration of abdominal abscess."
- b. "CT scanning of the pancreas."
- c. "CT guided biopsy procedure."

University of Bern, Switzerland. September, 1976.

- a. "CT guided biopsy."
- b. "CT scanning of pancreas."
- c. "CT detection and aspiration of intraabdominal abscess."

University of Zagreb, Yugoslavia. September, 1976.

- a. "CT guided biopsy."
- b. "CT scanning of pancreas."
- c. "CT detection and aspiration of intraabdominal abscess."

#### LECTURES/MEETINGS (CONT.)

University of Verona, Italy. September, 1976.

- a. "CT guided biopsy."
- b. "CT scanning of the pancreas."
- c. "CT detection and aspiration of intraabdominal abscess."

University of Frankfurt, Germany. September, 1976.

- a. "CT guided biopsy."
- b. "CT scanning of the pancreas."
- c. "CT detection and aspiration of intraabdominal abscess."

"Leading edge." Co-sponsored by Ohio Nuclear and Sloan-Kettering Cancer Institute, Philadelphia, Pennsylvania. September, 1976.

"Leading edge." Co-sponsored by Ohio Nuclear and Sloan-Kettering Cancer Institute, New York, New York. September, 1976.

Southern Permanente Radiologic Symposium, Los Angeles, California. September 18, 1976.  
"CT scanning of the abdomen."

Videotape Network for Continuing Medical Education, New York, New York. September 23, 1976.

"CT scanning of pancreas."

Annual Course on Computed Tomography, Rush Presbyterian-St. Luke's Hospital, Chicago, Illinois. September 29-30, 1976.

- a. "CT guided biopsy."
- b. "CT detection of intraabdominal abscess."

New Methods of Tumor Localization, University of Kentucky, Lexington, Kentucky. October 7-8, 1976.

"CT scanning of the body."

Institute for Graphic Communication, Boston, Massachusetts. October 17-19, 1976.

"Update on computerized tomography."

American Academy of Pediatrics Meeting, Chicago, Illinois. October 19, 1976.

"CT scanning in pediatric age group."

American College of Gastroenterology, Montreal, Canada. October 28, 1976.

"CT scanning of the pancreas."

Mallinckrodt Symposium for Computed Tomography, St. Louis, Missouri. October 31, 1976.

"CT guided biopsy: CT scanning for abscess."

**1977** Postgraduate course, Surgical Management Problems, Cleveland Clinic, Cleveland, Ohio.  
January 12-13, 1977.

"CT detection of abscesses."

"Leading edge." Co-sponsored by Ohio Nuclear and Sloan Kettering Cancer Institute, Atlanta, Georgia. January 27, 1977.

"Leading edge." Co-sponsored by Ohio Nuclear and Sloan Kettering Institute, Miami, Florida. January 28, 1977.

Texas Tech Medical College, Amarillo, Texas. February 11-12, 1977.

"Advantages of CT scanning of the body."

#### **LECTURES/MEETINGS (CONT.)**

Second Annual Symposium on Computed Tomography of the Head and Body, Cleveland Clinic Educational Foundation, Cleveland, Ohio. February 17, 1977.

"CT of the pancreas and CT biopsies."

Midwest Cancer Conference, Wichita, Kansas. March 4, 1977.

"CT scanning of pancreatic neoplasms."

CT Symposium. Co-sponsored by Heidelberg Cancer Institute & Siemen's Corp., Heidelberg, Germany. March 16, 1977.

"CT detection of abscess and CT guided biopsies."

International Scanning Symposium, Long Beach, California. March 17-18, 1977.

"CT guided biopsies."

First Annual North America Radiology Conference, Puerto Vallarta, Mexico. April 18-19, 1977.

"Body CT."

Indiana University School of Medicine, Indianapolis, Indiana. April 20-27, 1977.

"Computed tomography in renal masses."

Cleveland Radiological Society Meeting, Cleveland, Ohio. April 25, 1977.

"CT of the pancreas."

Japanese Radiological Society, Osaka, Japan. June, 1977.

"CT of the pancreas."

Visiting Professor, University of Tokyo, Tokyo, Japan. June, 1977.

a. "CT biopsy."

b. "CT of the pancreas."

Massachusetts Institute of Technology, Boston, Massachusetts. July 28, 1977.

a. "Clinical CT of the head and body."

b. "Principles of computed tomography."

Massachusetts General Hospital, Boston, Massachusetts. July 29, 1977.

"Comparison of lymphangiography and CT for lymph node disease."

Ohio Academy of Family Physicians, Columbus, Ohio. August 5, 1977.

"CT of the body."

American Urological Association, Yale University, New Haven, Connecticut. September 9, 1977.

"ACTA scanning of the kidneys."

Rush Presbyterian-St. Luke's Hospital Fourth Annual CT Symposium, Chicago, Illinois.  
September 26, 1977.

a. "CT of the pancreas."

b. "Further progress with CT guided biopsy."

American Roentgen Ray Society. September 29, 1977.

"CT detection of intraabdominal abscesses."

San Diego Postgraduate Radiology Course, San Diego, California. October 6, 1977.

"CT of the kidneys."

San Diego Postgraduate Radiology Course, San Diego, California. October 6, 1977.

"CT of retroperitoneum and pelvis."

#### **LECTURES/MEETINGS (CONT.)**

Second Annual Body Imaging Conference, Kauai, Hawaii. October 12-14, 1977.

a. "CT of pancreas and extrahepatic biliary system."

b. "CT applications in abscess."

c. "Preliminary experience with second CT scanner."

d. "CT of abscess, diagnosis, pitfalls, results. Comparisons with gallium scanning."

**1978** Postgraduate Course on Computed Tomography, Society of Computed Body Tomography, San Diego, California. January 30-February 4, 1978.

a. "CT scanning in patients with pancreatitis."

b. "CT and lymphangiography."

c. "CT biopsy and aspiration techniques in various pathologic procedures."

Visiting Professor. Univ. of Texas Health Science Ctr., Dallas, Texas. February 20-21, 1978.

Park City Gastrointestinal Radiology Course, University of Utah, Salt Lake City, Utah. February 24-March 3, 1978.

a. "CT of abdominal abscesses."

b. "CT-guided biopsies."

Annual Meeting of the Society of Computed Body Tomography, San Diego, California. March 1-3, 1978.

a. "CT of pancreatitis."

b. "CT interventional procedures."

Advances in Urology, Cleveland Clinic, Cleveland, Ohio. March 9-10, 1978.

"Computerized tomography in the diagnosis of renal cell carcinoma."

American Gastroenterological Association, National Institutes of Health Workshop. March 13, 1978.

"Computerized tomographic hepatic imaging techniques."

New Orleans Radiological Society Sixth Annual Spring Roentgen Conference. New Orleans,

Louisiana. April 19-22, 1978.

- a. "CT of liver and gallbladder."
- b. "CT of kidney and retroperitoneum."
- c. "CT of pancreas."

Continuing Medical Education, Case Western Reserve University, Elyria Memorial Hospital, Elyria, Ohio. April, 1978.

"Percutaneous biopsy procedures."

Massachusetts General Hospital and Harvard Medical School Sixth Annual Postgraduate Course, Boston, Massachusetts. May 17-18, 1978.

- a. "CT of abdominal lymph nodes."
- b. "Interventional CT scanning."

Visiting Professor. Bowman Gray School of Medicine, Winston-Salem, North Carolina. May 22-24, 1978.

College of Medicine of the University of South Florida, Tampa, Florida. July 31-August 2, 1978.

- a. "CT of pancreas."
- b. "CT assisted biopsies."
- c. "New horizons in CT scanning."

#### **LECTURES/MEETINGS (CONT.)**

Fifth Annual CT Symposium, Rush Presbyterian-St. Luke's Hospital, Chicago, Illinois. September 23-24, 1978.

- a. "CT of the pancreas."
- b. "CT of abdominal fluid."
- c. "Interventional CT scanning."

Clinical Cancer Colloquia, St. Louis University Medical Center, St. Louis, Missouri. October 18, 1978.

"CT of abdominal cancer."

**1979** Sixth Annual Northwestern Ohio Cancer Conference, Medical College of Ohio, Toledo, Ohio. February 3, 1979.

"Role of CT in the breast cancer patient."

Seminar on Diagnostic Imaging. Correlation of Ultrasound, Computed Body Tomography and Nuclear Medicine. March 6-7, 1979.

- a. "CT of the retroperitoneum and pelvis."
- b. "CT approach to liver imaging."

An Integrated Approach to the Abdominal Ultrasound and Computerized Tomography of the Trunk. Southwestern Medical School, the University of Texas Health Science Center, Dallas, Texas. May 24-26, 1979.

- a. "CT angiography."
- b. "CT of abdominal abscesses."
- c. "CT of mass lesions of the liver."
- d. "CT of retroperitoneal adenopathy."
- e. "CT-Guided Biopsies."

Symposium on CT Body Scanning, Memorial Medical Center, Savannah, Georgia. July 10-11, 1979. "CT of the Abdomen."

Univ. of Kentucky, Lexington, Ky. July 19-21, 1979. "Current status of CAT-scanning for 'radioimmunodetection of cancer'."

Sixth Annual Symposium on Computerized Tomography, Rush Presbyterian-St. Luke's Hospital, Chicago, Illinois. September 18-19, 1979. "CT of intraabdominal fluid collections."

Fourth Annual International Body Imaging Conference, Maui, Hawaii. October 13-19, 1979.

- a. "CT and ultrasound of intraabdominal abscesses."
- b. "CT interventional procedures."

American College of Gastro-enterology, Los Angeles, California. October 24-27, 1979.

- a. "Computerized tomography."
- b. "CT role for evaluation of obstructive jaundice."

Venezuelan Society of Radiology, Caracas, Venezuela. November 7, 1979.

- a. "Pancreatic neoplasms."
- b. "Pancreatitis."
- c. "CT-guided procedures."
- d. "Intraabdominal anatomical spaces. Detection of abscesses."

**1980** Annual Meeting of the Society of Computed Body Tomography, San Diego, California. March 3-8, 1980.

- a. "CT of abscess overview."
- b. "CT of pancreatitis."
- c. "Effective mAs variation on CT images."
- d. "CT interventional procedures."

**LECTURES/MEETINGS (CONT.)**

Interventional Symposium of Computerized Tomography, Las Vegas, Nevada. April 7-11, 1980.

- a. "CT of pancreatitis."
- b. "Effect of mAs variation on CT images."
- c. "CT interventional procedures."

Emergency Room Medicine Revisited, Maricopa County. Gen. Hosp., Phoenix, Az. Apr.. 11-14, 1980.

- a. "Ultrasound and CT evaluation of trauma to the abdomen."
- b. "Inflammatory diseases in the abdomen."
- c. "Acute processes in the upper abdomen as evaluated by ultrasound and CT."
- d. "Acute processes in lower abdomen."

Ultrasound and Computerized Tomography of the Trunk, University of Texas, Dallas, Texas. May 8-10, 1980.

- a. "CT of pancreatitis."
- b. "CT interventional procedures."
- c. "Effective mAs variation upon CT image quality."
- d. "Vascular angle as a sign of retroperitoneal disease."

Tokyo, Japan. August 5-10, 1980.

"Body imaging."

Harvard Medical School, Cambridge, Massachusetts. September 22-25, 1980.

"Computed tomography for the diagnostician: 1980."

Gates Mills Meeting, Case Western Reserve University School of Medicine, Cleveland, Ohio. October 2-3, 1980.

**1981** Vail Conference, Vail, Colorado. March 8-14, 1981.

International CT Symposium, Society of Computed Body Tomography, New Orleans, Louisiana.

April 13-17, 1981.

Cleveland Clinic Foundation, Cleveland, Ohio. May 7, 1981.

"Controversies in new imaging."

Medicine 1981, Bond Court Hotel, Cleveland, Ohio. May 8, 1981.

Ninth Annual Symposium, Boston, Massachusetts. May 27-29, 1981.

G.E. Medical Systems, Milwaukee, Wisconsin. July 16, 1981.

Nurenberg, West Germany. September 26-October 2, 1981.

Eleventh Annual Meeting and Postgraduate Course, the Society of Gastrointestinal Radiologists, Boca Raton, Florida. October 1-4, 1981.

"Radiologic diagnosis and treatment of abdominal abscess."

Virginia Chapter of the American College of Radiology, the University of Virginia Medical Center, Charlottesville, Virginia. October 11, 1981.

"Practical aspects of head and body CT."

St. Michael Hospital Celebrates Four Decades of Care - Honor Dinner Anniversary, Postgraduate Educational Conference, Milwaukee, Wisconsin. November 5-6, 1981.

"The CT scan - its role in biopsies and aspiration of solid and cystic tumors and fluid collections."

#### **LECTURES/MEETINGS (CONT.)**

The Medical College of Wisconsin, Milwaukee, Wisconsin. November 7, 1981.

- a. "Computed tomography of the pancreas."
- b. "Multi-modality approach to abscess drainage."
- c. "Computed tomography of the liver."

Wood Veterans Administration Medical Center, Wood, Wisconsin. November 7, 1981.

"Topics in computed tomography."

Radiological Society of North America - 67th Scientific Assembly and Annual Meeting, Chicago, Illinois. November 15-20, 1981.

"Clinical comparison of a small caliber cutting needle with large caliber cutting needles."

**1982** Guest Professor. Harvard Medical School, Department of Radiology, Beth Israel Hospital, Boston, Massachusetts. January 18-19, 1982.

Cleveland Surgical Society, Cleveland, Ohio. January 20, 1982.

"Intraabdominal abscesses - the invasive radiologist or the surgeon?"

Symposium on Computed Body Tomography, Society of Computed Body Tomography, Tarpon Springs, Florida. February 16-18, 1982.

- a. "An update on NMR imaging."
- b. "Biopsy guidance: techniques, applications."
- c. "Abdominal abscess: detection, therapy."

Euclid General Hospital Staff, Cleveland, Ohio. February 25, 1982.

"Percutaneous interventional procedure."

Huron Road Hospital Medical/Surgical Conference, Cleveland, Ohio. March 1, 1982.

"Interventional radiography."

Lakeside Hospital Saturday Conference, University Hospitals of Cleveland, Cleveland, Ohio.

March 6, 1982.

"CT."

Lutheran Medical Center Grand Rounds, Cleveland, Ohio. March 10, 1982.

"Percutaneous biopsy procedures."

Kern Medical Center, Bakersfield, California. March 16, 1982.

"CT scanning and interventional radiology."

International CT Symposium, Harvard Medical School, New Orleans, Louisiana. April 14, 1982.

- a. "CT-guided biopsies."
- b. "CT in abdominal abscess drainage."
- c. "Total body NMR."

Visiting Professor, Flint Osteopathic Hospital, Flint, Michigan, April 23, 1982.

Medicine 1982. Case Western Reserve University School of Medicine, Bond Court Hotel, Cleveland, Ohio. May 6, 1982.

The American Roentgen Ray Society - Eighty-second Annual Meeting, New Orleans, Louisiana. May 12, 1982.

- a. "In vivo NMR imaging."
- b. "The use of computed tomography for interventional procedures."

Maryland Radiological Society, Baltimore, Maryland. May 18, 1982.

"Percutaneous drainage of abscesses."

#### **LECTURES/MEETINGS (CONT.)**

Visiting Professor, University of Maryland School of Medicine and Hospital, Baltimore, Maryland. May 19, 1982.

"Percutaneous drainage of abscesses."

The Society of Nuclear Medicine, Miami Beach, Florida. June 15, 1982.

"Review of the basic principles, available instruments and applications of nuclear magnetic resonance in medicine."

Clinical NMR Symposium, University Hospitals of Cleveland/Case Western Reserve University, Bond Court Hotel, Cleveland, Ohio. September 8-10, 1982.

- a. "NMR of the liver with CT correlations."
- b. "NMR of the pancreas."

Cleveland Area Medical Physicians (CAMP), Radiation Safety Group, University Hospitals of Cleveland, Cleveland, Ohio. September 15, 1982. "Clinical applications of NMR imaging."

Computed Tomography: 1982, Fifth Annual Harvard Postgraduate Course, Harvard Medical School, Boston, Massachusetts, September 21, 1982.

- a. "Normal abdominal anatomy: vascular, muscular, compartments, organs."
- b. "Pancreas."
- c. "Retroperitoneum: normal anatomy compartments, vessels, lymph nodes."

Moderator, Nuclear Magnetic Resonance Imaging: An Introduction, Harvard Medical School Department of Continuing Education, Massachusetts General Hospital, Long Wharf Hotel, Boston, Massachusetts. September 25, 1982.

- a. "Clinical studies."
- b. "NMR of the abdomen." (panel discussion)

Society of Gastrointestinal Radiologists, Twelfth Annual Meeting and Postgraduate Course, Banff Springs Hotel, Banff, Alberta, Canada. October 12-16, 1982.

"Advanced technology in the alimentary tract."

State University of New York Upstate Medical Center, Syracuse, New York. October 22, 1982.

- a. "CT in diagnosis of hepatobiliary disease."
- b. "Localization of abscesses with computed tomography."
- c. "Percutaneous drainage of abscesses and guided biopsies by CT."

Regional Program in Continuing Medical Education, Case Western Reserve University School of Medicine, Parma Community Hospital, Parma, Ohio. November 10, 1982.

Youngstown State University, Second Annual Cancer Symposium, Youngstown, Ohio. November 13, 1982.

"Radiologic approach to percutaneous biopsy."

NEONS (Dr. Brodkey). Cleveland Skating Club, Cleveland, Ohio. November 19, 1982.

Radiological Society of North America - 68th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 27 - December 2, 1982.

- a. "NMR imaging of the body and basic physics."
- b. "NMR imaging of the liver."

#### **LECTURES/MEETINGS (CONT.)**

New York University Medical Center, Postgraduate Medical School, Grand Hyatt Hotel, New York, New York. December 16-17, 1982.

- a. "Liver."
- b. "Peritoneal spaces."
- c. "CT of interventional procedures."
- d. "Body CT workshops."
- e. "CT of interventional procedures workshops."

**1983** "Radiology and anatomy." Phase I Metabolism Teaching Committee Lecture, Case Western Reserve University School of Medicine, Cleveland, Ohio. January 3, 1983.

King Faisal Specialist Hospital and Research Centre, Riyadh, Saudi Arabia. January 27-February 7, 1983.

- a. "Percutaneous radiologic biopsy procedures - computed tomography, ultrasound, and fluoroscopy."
- b. "Computed tomography of retroperitoneum."
- c. "NMR of the body."
- d. "Clinical comparison of CT and NMR."
- e. "NMR of the central nervous system."

Sixth Annual Refresher Course, Society of Computed Body Tomography, Hotel Del Coronado, San Diego, California. February 25-March 2, 1983.

"Percutaneous biopsy and abscess drainage procedures."

Session I: NMR Imaging--Introduction and Clinical Studies, Ninth Annual Meeting, American College of Nuclear Physicians, NMR Symposium, Harvard Medical School, Cerramar Beach

Hotel, Dorado, Puerto Rico. March 11-12, 1983. "NMR imaging of the body."

Eastern Radiologic Society, Hilton Head Island, South Carolina. April 4-7, 1983.

Seventh Annual Post-graduate Course, Aultman Hospital, Canton, Ohio. April 8, 1983.

- a. "Multimodality approach to percutaneous procedures."
- b. "Clinical comparison of CT and NMR."

The American Roentgen Ray Society Eighty-third Annual Meeting, Hilton Hotel, Atlanta, Georgia. April 18-22, 1983.

- a. "Celiac ganglia block."
- b. "NMR of the pancreas."

Musculoskeletal Tumor Society, Marriott Inn, Beachwood, Ohio. April 29-30, 1983.

"Recent advances in nuclear magnetic imaging."

The Impact of Technology on Surgery, Society of Air Force Clinical Surgeons, Hyatt Regency Hotel, San Antonio, Texas. May 2-3, 1983.

"Impact of CAT scans, NMR on practice of surgery in Cleveland."

International Symposium and Course on Computer Assisted Imaging Techniques, Harvard Medical School, Hilton Hotel, San Francisco, California. May 4-5, 1983.

- a. "CT and US interventional procedures."
- b. "CT of pancreatic Ca."
- c. "CT of inflammatory disease of the pancreas."
- d. "General NMR and CT in the body."

#### **LECTURES/MEETINGS (CONT.)**

Clinical Evaluation of Common GI Problems. Update: New Cross-sectional Imaging Techniques, American Gastroenterological Association, Postgraduate Course and Annual Meeting, Sheraton Washington Hotel, Washington, D.C. May 21-22, 1983.

"Preliminary experimental results in humans and animals with a superconducting whole-body, nuclear magnetic resonance scanner."

Nuclear Magnetic Resonance (NMR): A 1983 Update, Society of Nuclear Medicine, Correlative Imaging Council, St. Louis, Missouri. June 6, 1983.

"Clinical experience with whole body imaging applications."

Allegheny General Hospital (Pittsburgh, Pennsylvania), The Greenbrier, White Sulphur Springs, West Virginia. July 10, 1983.

- a. "NMR clinical experience in the chest and abdomen."
- b. "NMR: interesting prospects for the future."

Society of Computed Body Tomography Annual Meeting, Keystone, Colorado. July 30 - August 13, 1983.

Radiology: 1983/Issues in NMR, Research in Radiology. The Impact of Current Trends in Radiology. American College of Radiology Summit Meeting. Indian Lakes Resort, Bloomingdale, Illinois. August 19-21, 1983.

Program Co-Chairman. Clinical NMR Symposium, University Hospitals of Cleveland/Case Western Reserve University, Bond Court Hotel, Cleveland, Ohio. August 3-September 2, 1983.

"NMR of the liver."

Computed Tomography 1983: CT and NMR Update. The Sixth Annual Harvard Postgraduate Course/ Harvard Medical School and the Brigham and Women's Hospital, Boston, Massachusetts. September 11-16, 1983.

- a. Neck, Chest and Abdominal CT: Liver and Spleen.
- b. Retroperitoneum, Pelvis, Vessels, and Special Procedures: Kidney.
- c. Workshop/Body CT Emphasis, Session III: Abdominal Disease.
- d. Clinical NMR: Thorax.
- e. Workshop/NMR Emphasis, Session I: NMR of the Abdomen.

Harvard Medical School/Massachusetts General Hospital, Boston, Massachusetts. October 7, 1983.

"Clinical applications of NMR imaging."

Sixty-ninth Clinical Congress of the American College of Surgeons, Mimosa Hall, Omni International Hotel, Atlanta, Georgia. October 17, 1983.

"Perspectives on invasive devices/procedures used by non-surgeons."

The Society of Gastrointestinal Radiologists 13th Annual Meeting and Postgraduate Course, Southampton Princess Hotel, Southampton, Bermuda. October 19-23, 1983.

- a. "What really is being seen on NMR scans?"
- b. "NMR in the trunk - today, tomorrow."

Visiting Professor, Ohio State University, Columbus, Ohio. November 10, 1983.

"CT of the liver."

Residents and Attending Staff Lecture, Ohio State University Hospitals, Columbus, Ohio. November 10, 1983.

"Multimodality approach to percutaneous biopsies."

#### **LECTURES/MEETINGS (CONT.)**

Central Ohio Radiological Society, Center for Tomorrow, Ohio State University Campus, Columbus, Ohio. November 10, 1983.

"NMR of the liver and pancreas."

Radiological Society of North America, Sixty-ninth Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 13-15, 1983.

- a. "NMR Imaging of the body." (with R. J. Alfidi, M.D.)
- b. "Whole body NMR imaging with a 1.5 tesla superconducting magnet."

Medical and Surgical Approach to Pancreatic and Biliary Disorders. Huron Road Hospital, Cleveland, Ohio. November 21, 1983.

"NMR and CT of the pancreas."

Phase I Metabolism Committee, Case Western Reserve University School of Medicine, Cleveland, Ohio. December 17, 1983.

"Radiology and anatomy."

**1984** The New England Roentgen Ray Society, Inc., Scientific Meeting - CT (GI). Howard Johnson's, Cambridge, Massachusetts. January 20, 1984.

"Recent advances in interventional procedures and imaging of the abdomen."

American College of Radiology Symposium on Computed Body Tomography, Washington, D.C. January 21, 1984.

- a. "Pancreas."
- b. "Biopsies, draining procedures."

Visiting Professor, Department of Radiology, Cleveland Clinic Foundation, Cleveland, Ohio. January 23, 1984. "Newest aspects of CT procedures."

Guest Lecturer, Cleveland Radiological Society, Cleveland Health Museum, Cleveland, Ohio. January 23, 1984.

"Newest aspects of CT procedures."

84th Annual Meeting of the American Roentgen Ray Society, Las Vegas Hilton, Las Vegas, Nevada. April 8-9, 1984.

- a. "Liver." Categorical Course on Computed Body Tomography with Nuclear Magnetic Resonance Imaging Correlation.
- b. "Multimodality approach to percutaneous procedures." Refresher Course.

Panel discussion, Medicine 1984, Case Western Reserve University/University Hospitals of Cleveland, Bond Court Hotel, Cleveland, Ohio. May 11, 1984.

"Indications for US and CT in GI tract disorders."

Radiologic Imaging - 1984, University of Wisconsin Continuing Medical Education, The Drake Hotel, Chicago, Illinois. May 16, 1984.

- a. "The abdomen and NMR."
- b. "Abdominal NMR vs. abdominal CT."

Trauma Symposium, University Hospitals of Cleveland, Airport Marriott, Cleveland, Ohio. June 15, 1984.

"Interventional radiology."

#### LECTURES/MEETINGS (CONT.)

Summer Imaging: Abdominal, Neurological Diagnosis and Interventional Techniques, Emory University (Atlanta, Georgia), Amelia Island Plantation, Amelia Island, Florida. August 13-17, 1984.

- a. "Pancreatic CT."
- b. "NMR of the liver and kidney."
- c. "NMR of the chest."
- d. "Interventional." (panel)
- e. "NMR of the pelvis."

Computed Tomography and NMR Update: 1984, Harvard Medical School and Brigham and Women's Hospital, Boston, Massachusetts. September 9-14, 1984.

- a. "Biliary CT."
- b. "Bladder prostate gynecologic."
- c. Panel: "Competing modalities for liver tumor imaging."
- d. Workshop: Interventional techniques.
- e. Workshop: CT vs. NMR in the abdomen.

Ninth Annual International Body Imaging Conference, West Park Hospital (Canoga Park, California), Royal Lahaina Hotel/Hyatt Regency Maui, Maui, Hawaii. October 13-21, 1984.

- a. "CT/MRI of the liver."
- b. "CT of the retroperitoneum."
- c. "CT/MRI of the pancreas."
- d. "CT biopsy techniques."

**1985** Basic Science Series: Urology, Case Western Reserve University School of Medicine, Cleveland, Ohio. January 5, 1985.

"NMR."

Visiting Professor, University of Kentucky, Lexington, Kentucky. January 11-12, 1985.

- a. "MRI of the mediastinum."
- b. "MRI of the pelvis."
- c. "MRI of the brain."

Guest Lecturer, Blue Grass Radiological Society, Hyatt Regency, Lexington, Kentucky. January 11, 1985.

"MRI of the mediastinum."

St. Louis University Medical Center City Wide Meeting, St. Louis, Missouri. January 14, 1985.

- a. "CT and NMR of the liver."
- b. "CT and NMR of the pancreas."

Eighth Annual Society of Computed Body Tomography Course, Hotel Intercontinental, San Diego, California. March 25-28, 1985.

- a. "Interventional CT." (Workshop Moderator)
- b. "Interventional and pancreatic CT." (Moderator of Session)
- c. "CT-guided biopsies." (Guest Lecturer)
- d. "MRI of the pancreas." (Guest Lecturer),

Panelist, Current Topics, American College of Physicians 66th Annual Session, Washington Convention Center, Washington, D.C. March 31, 1985.

"Nuclear magnetic resonance (NMR)."

Grand Rounds, Case Western Reserve University School of Medicine, Cleveland Museum of Health, Cleveland, Ohio. April 17, 1985.

"New dimensions in imaging: tools of the third dimension."

#### **LECTURES/MEETINGS (CONT.)**

CT and MRI of the Body. Body Imaging Update: Computed Tomography, Magnetic Resonance Imaging, Ultrasound. Fifth Annual Washington Imaging Conference, Department of Radiology, the Alexandria Hospital, Alexandria, Virginia, J.W. Marriott Hotel, Washington, D.C. April 25, 1985.

- a. "MRI of the pancreas."
- b. "CT of pancreatitis."
- c. "CT-guided procedures."

Clinical Symposium on NMR in the Abdomen, American Gastroenterology Association, New York Hilton, New York City, New York. May 14, 1985.

"NMR imaging of the liver, pancreas and biliary tree."

Case Western Reserve University School of Medicine, Continuing Medical Education Department, Good Samaritan Hospital, Sandusky, Ohio. May 17, 1985.

- a. "CT-guided biopsies."
- b. "CT-guided procedures."

Mackinac Island Imaging Conference, Grand Hotel, Mackinac Island, Department of Radiology, William Beaumont Hospital, Royal Oak, Michigan. August 8, 1985.

- a. "MR and CT of the pancreas."
- b. "MR and CT of the liver."
- c. "Evaluation of abscesses with CT."

Phase II Musculoskeletal Committee, Case Western Reserve University School of Medicine, Cleveland, Ohio. September 13, 1985.

"CT and MRI of the musculoskeletal system."

Trauma: Definitive Hospital Management of Life Threatening Emergencies, Continental Room, Chicago Hilton & Towers, Chicago, Illinois. October 18, 1985.

"Abdominal abscess - radiologist's role."

Hilton-Cleveland-South, Department of Medicine, Gastrointestinal Division, University Hospitals of Cleveland, Cleveland, Ohio. October 31, 1985.

"CT and NMR applications to discussion of pancreas and liver."

**1986** Pulmonary Conference, Grand Rounds, Case Western Reserve University, Veterans Administration Hospital-East Boulevard, Cleveland, Ohio. February 18, 1986.

"CT of the chest."

The Ninth Annual Society of Computed Body Tomography, the Hyatt at Palmetto Dunes, Hilton Head, South Carolina. March 19-20, 1986.

- a. "Interventional CT." (Workshop)
- b. "CT-guided biopsy."

Staff, University Suburban Health Center, South Euclid, Ohio. May 12, 1986.

"New concepts in CT imaging."

Computed Tomography and MRI Update: 1986, Harvard Medical School/The Brigham and Women's Hospital, The Westin Hotel, Copley Place, Boston, Massachusetts. September 9-10, 1986.

- a. "Pancreas."
- b. "Interventional abscess drainage."
- c. "MRI of the thorax." (Workshop).

RSNA Guest Speaker, Southern Medical Association Annual Meeting, Georgia World Congress Center, Atlanta, Georgia. November 9, 1986.

"Abdominal MRI."

#### **LECTURES/MEETINGS (CONT.)**

**1987** Grand Rounds Lecture - Pulmonary Fellowship Training Program, VA Medical Center, Cleveland, Ohio, January 13, 1987.

"An update on chest CT scanning."

Panelist, Society of Gastrointestinal Radiologists Annual Meeting, Camelback Inn, Scottsdale, Arizona. February 11, 1987.

"Abdominal MRI and its relationship to other diagnostic techniques."

Giornate di Radiologia Diagnostica Oncologica: Diagnostica per Immagini Delle Neoplasie Pelviche, Rome, Italy. March 19, 1987.

- a. "CT and MRI in ovarian carcinoma."
- b. "The role of biopsies in the evaluation of preoperative staging and postoperative follow-up of the rectal carcinoma."

Tenth Annual Society of Computed Body Tomography Annual Meeting and Postgraduate Course, Hotel Inter-Continental, San Diego, California. March 30-31, 1987."

- a. "Abscesses: diagnosis and drainage."
- b. "Interventional instrumentation - liver, spleen, pancreas: state of the art." (Workshop)

87th Annual Meeting of the American Roentgen Ray Society, Fountain Bleau Hotel, Miami Beach, Florida. April 29, 1987.

"Cardiovascular and abdominal MRI imaging."

Visiting Professor, Akron General Medical Center, Akron, Ohio. May 13, 1987.

"The use of CAT scan in oncology."

International Congress on Intraabdominal Infections, Surgical Infection Society and the Paul-Ehrlich-Society of West Germany, Congress Center Hamburg, Hamburg, West Germany. June 1-2, 1987.

"Percutaneous drainage of intraabdominal abscess."

Fifth Annual Greenbrier Radiology Conference, Allegheny General Hospital, Pittsburgh, Pennsylvania, The Greenbrier Resort, White Sulphur Springs, West Virginia. July 11, 1987.

- a. "CT/MRI of the pancreas."
- b. "Hepatic CT/MRI."
- c. "CT/MRI of the pelvis."
- d. "Interventional CT procedures."

Clinical Applications of MRI. Consensus Development Conference on Magnetic Resonance Imaging. Masur Auditorium, Clinical Center, National Institutes of Health, Bethesda, Maryland. October 26-28, 1987.

"MRI of the genitourinary system and retroperitoneum."

Lectures to Doctors and Nurses, Union Hospital, Dover, Ohio. (Sponsored by the American Cancer Society.) November 19, 1987.

"Interventional CT procedures."

Radiological Society of North America 73rd Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. Nov.29-Dec. 4, 1987.

"Interventional CT procedures: pitfalls in computed tomography of the abdomen and pelvis." (Refresher Course)

**1988** Society of Gastrointestinal Radiologists, Cable Beach Hotel, Nassau, Bahamas. January 16-20, 1988.

"Interventional procedures involving the pancreas."

#### **LECTURES/MEETINGS (CONT.)**

Society of Computed Body Tomography, Eleventh Annual Course, Hyatt Regency Monterey, Monterey, California. February 29-March 4, 1988.

- a. "CT-guided biopsy techniques and procedures."
- b. "CT Club." (Demonstration and discussion of interesting cases.)

Pulmonary Fellowship Training Program, Clinical Conference, Case Western Reserve University School of Medicine, Cleveland, Ohio. August 30, 1988.

"CT scan of the chest."

Radiology in Killarney, 10th Annual International Radiology Congress, Department of Radiology, University of Connecticut, Hotel Europe, Killarney, Ireland. September 19-24, 1988.

- a. "CT and MR of the liver."
- b. "Lung biopsy."
- c. "CT and MR of the kidney."
- d. "MR of the adrenal."
- e. "Percutaneous abscess drainage."
- f. "Biopsy of the liver and pancreas."
- g. "CT and MR of the pancreas."
- h. "CT and US of abscesses."

Radiological Society of North America 74th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. December 1, 1988.

"CT interventional procedures."

General Medical Staff, Southwest General Hospital, Case Western Reserve University Continuing Medical Education, Cleveland, Ohio. December 21, 1988.

"New imaging techniques of the body."

**1989** Magnetic Resonance Imaging & CT Update: 1989, Harvard Medical School, Department of Radiology and Continuing Education and Brigham and Women's Hospital, Hyatt Regency, Cambridge, Massachusetts. October 23-26, 1989.

- a. "Kidney."
- b. "Male pelvis."
- c. "Lymph nodes."
- d. "'Risk free' biopsy." (Workshop)

Hospital Services Management Center Planning Retreat, University Hospitals of Cleveland, Gwinn Estate, Cleveland, Ohio. November 2, 1989. (Attended for Dr. Alfidi.)

Radiological Society of North America 75th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 26 - December 1, 1989.

- a. "CT guided procedures." (Refresher Course)
- b. "Effect of needle gauge and level of anticoagulation on bleeding associated with biopsy of the liver." (Works in Progress/co-author)
- c. "Effect of oral glucose on hepatic portal venous flow in alcoholic cirrhosis." (Works in Progress/co-author)
- d. "Hemostatic protein polymer sheath." (Co-author)

**1990** Medical Residents Radiology Conference, Department of Medicine, University Hospitals of Cleveland/Case Western Reserve University, Cleveland, Ohio. February 6, 1990.

"CT/CT Interventional."

Dr. McFee's Symposium, Cleveland Hilton South, Cleveland, Ohio. March 3, 1990

"CT and MR of GYN neoplasm."

#### **LECTURES/MEETINGS (CONT.)**

Society of Cardiovascular and Interventional Radiology Annual Meeting, Miami, Florida. March 26-29, 1990.

"Biopsy techniques." (Workshop)

Society of Computed Body Tomography Thirteenth Annual Course, Palm Springs, California. April 2-6, 1990. "Risk free biopsies."

Visiting Professor, Department of Radiology, Division of Cardiovascular and Interventional Radiology, University of Minnesota, Minneapolis, Minnesota. June 11-12, 1990.

- a. "Celiac nerve blocks."
- b. "New techniques in abscess drainage."
- c. "New perspectives in percutaneous biopsies."

NEOUCOM, Rootstown, Ohio. September 19, 1990.

"Interventional CT."

Medicine 1990 Presents: Specialty Medicine for the Primary Practitioner, University Hospitals of Cleveland, Day's Inn, North Randall, Ohio. November 14, 1990.

"MRI vs. CT: appropriate use."

Radiology Grand Rounds, Visiting Professor, University of Massachusetts, Worcester, Massachusetts. December 13-14, 1990.

"Recent advances in interventional CT."

**1991** Radiology Retreat, University Hospitals. January 12-13, 1991.

Society of Cardiovascular and Interventional Radiology 16th Annual Course, San Francisco, California. February 16-21, 1991

"Software tool for expediting angled CT procedures." (workshop)

Society of Computed Body Tomography 14th Annual Course, Washington, D.C. April 15-19, 1991.

- a. "New aspects of CT interventional procedures." (paper)
- b. "Percutaneous abscess drainages." (paper)
- c. "CT of the pancreas." (workshop)
- d. "Inflammatory process of the abdomen." (workshop)
- e. "Abscess drainages." (workshop)

Scientific Exhibits Committee, American Roentgen Ray Society 91st Annual Meeting, Boston, Mass. May 5-10, 1991.

Guest speaker. University of Rhode Island, Providence, Rhode Island. August 12-15, 1991.  
"Body CT"

XXIII Congresso Brasileiro de Radiologia, Sao Paulo, Brasil. October 12-15, 1991.

- a. "Imaging of peritoneal anatomy."
- b. "Inflammatory processes of the abdomen."
- c. "CT/MRI of the kidney."
- d. "CT of inflammatory pancreatic disease."
- e. "CT of neoplastic pancreatic disease."
- f. "CT guided biopsy procedures."
- g. "CT guided drainage procedures."

#### **LECTURES/MEETINGS (CONT.)**

Annual Magnetic Resonance Imaging/Computed Tomography Post-graduate Course, Brigham and Women's Hospital, Boston, Massachusetts. October 28 to November 1, 1991.

- a. "New interventional techniques." (postgraduate course)
- b. "Abscess detection and treatment." (postgraduate course)
- c. "Trauma." (postgraduate courses)
- e. "Interventional techniques." (2 workshops)

Third Annual Gerald T. Kent Memorial Symposium, University Suburban Health Center, South Euclid, Ohio. October 30, 1991.

Current Surgical Issues and Challenges workshops, Case Western Reserve University, Cleveland, Ohio. November 21, 1991.

"Imaging techniques and intervention in primary and metastatic colon tumors."

Radiological Society of North America 77th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 30 to December 6, 1991.

- a. "Protein polymer sheath to limit bleeding at percutaneous biopsy: effectiveness with platelet dysfunction." (paper)

- b. "Angled biopsy software assistance." (paper)
- c. "Categorical course on interventional radiology: percutaneous biopsy of the abdomen and chest - an update." (workshop)
- d. "Diagnosis and treatment of mediastinal and abdominal inflammatory processes." (workshop)
- e. Refresher Course Committee member.

**1992** Surgery Today, Kulas Auditorium, University Hospitals/Case Western Reserve University, Cleveland, Ohio. February 5, 1992.

"Percutaneous interventional CT."

Society of Gastrointestinal Radiologists 21st Annual Meeting, Hyatt Regency Grand Cypress, Orlando, Florida. February 16-21, 1992.

Society of Computed Body Tomography & Magnetic Resonance 15th Annual Course, Westin La Paloma Resort, Tucson, Arizona. March 9-13, 1992.

- a. "CT of the liver." (workshop)
- b. "Normal anatomy of peritoneum." (workshop)
- c. "CT biopsy." (workshop)
- d. "Abscess diagnosis & drainage." (workshop)

Society of Cardiovascular & Interventional Radiology 17th Annual Meeting, Washington Hilton & Towers, Washington, DC. April 4-9, 1992.

"Radiology in Scotland," Edinburgh and St. Andrews, Scotland, sponsored by: Windham Hospital, Willimantic, Connecticut, and the Scottish Radiological Society. April 24-May 3, 1992.

- a. "CT of the liver."
- b. "CT/MRI of the kidney."
- c. "CT guided biopsy procedures."
- d. "Inflammatory processes of the abdomen."
- e. "CT of neoplastic pancreatic disease."
- f. "CT guided drainage procedures."

Academic Advisory Council for General Electric, Chicago, Illinois. July 16, 1992. Consultant on Academic Advisory Council.

#### **LECTURES/MEETINGS (CONT.)**

Radiological Society of North America - 78th Annual Meeting, McCormick Place, Chicago, Illinois. November 29-December 4, 1992.

- a. Refresher Course Committee member
- b. "Diagnosis and treatment of mediastinal and abdominal inflammatory processes." (refresher course)
- c. "Interventional thoracic radiology: interventional thoracic procedures." (refresher course)

**1993** Guest Lecturer and Tutorial Instructor - University of Virginia Health Science Center, Charlottesville, VA. February 18 and 19, 1993.

Society of Computed Body Tomography & Magnetic Resonance 16th Annual Course, Buena Vista, Florida. February 27 - March 3, 1993.

Surgery Today, University Hospitals of Cleveland, Cleveland, Ohio. March 10, 1993  
"New developments in abscess drainage."

Department Reviewer — University of Pennsylvania, Philadelphia, Pennsylvania. March 31 - April 1, 1993.

American Roentgen Ray Society Annual Meeting, San Francisco, California. April 25 - 28, 1993.  
"In vivo treatment of prosthetic graft material with urokinase: an animal model."  
presented by D. Nakamoto, M.D.

Medical Imaging and Signal Processing Meeting, Ohio Aerospace Institute, Brookpark Ohio. May 11, 1993.

University Hospitals Strategic Planning Retreat, Stouffer Tower City Plaza Hotel, Cleveland, Ohio. May 14 - 15, 1993.

Association of University Radiologists 41st Annual Meeting, The Westin Hotel, Cincinnati, Ohio. May 19 - 23, 1993.

Kabi Pharmacia — Contrast Emulsion (KP7369) Medical Expert Meeting, Holiday Inn-Raleigh Durham Airport, Raleigh Durham, North Carolina. May 25, 1993.

GE Advisory Council, Fairmont Hotel, Chicago, Illinois. June 22 - 23, 1993.

Academic Leadership Retreat, Case Western Reserve University, Squire Valleevue Farm, Cleveland, Ohio. July 14, 1993.

GE Research & Development Center, Schenectady, New York. July 22, 1993.

Site visit at Picker International, Cleveland, Ohio. August 30, 1993.

Tele-lecture for Surgical Infections: Index and Reviews. Vol. 1, No. 2. September 1993.  
"Imaging Techniques for Surgical Infections."

Surgical Grand Rounds, University Hospitals of Cleveland, Cleveland, Ohio. October 23, 1993.  
"Evaluation of the Traumatized Abdomen." Dr. Fallon and Dr. Haaga (co-presenters)

Scientific Factory Visit, Siemens Corporation, Erlangen, Germany. November 6-11, 1993

#### **LECTURES/MEETINGS (CONT.)**

- 1993** Radiological Society of North America - 79th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 28 - December 3, 1993
- a. Refresher Workshop Committee
  - b. "Interventional Thoracic Radiology" (refresher course)

- 1994** University Hospitals Mission Statement and Organizational Retreat, Stouffers Tower City, Cleveland, Ohio. February 8, 1994.

- International London Courses in CT 1994, Perthshire, Scotland. March 13 - 17, 1994.
- a. "New developments in abscess drainage."
  - b. "Pancreatic tumors."
  - c. "CT interventional procedures." (3M Lecture)

- Society of Cardiovascular and Interventional Radiology 19th Annual Meeting, San Diego Convention Center, San Diego, California. March 20 - 24, 1994.
- a. "Biopsies: a general approach." (Plenary Lecture)

- b. SCVIR On-the-Air (radio interview)

Society of Computed Body Tomography/Magnetic Resonance Annual Course, Sheraton Hotel & Towers, Seattle, Washington. April 18 - 22, 1994.

- a. "Biopsies of the 21st century." (workshop)
- b. "Advanced abscess drainages." (workshop)

American Roentgen Ray Society 94th Annual Meeting, New Orleans Hilton, New Orleans, Louisiana. April 24 - 29, 1994.

- a. "Upper abdominal abscess: diagnosis and treatment." (instructional course done with R.A. Halvorsen)

6th Nordic Course in CT & MR Imaging, Uppsala, Sweden. October 3 - 5, 1994.

- a. "CT of the acute abdomen."
- b. "Interventional CT."

Saturday Medicine Clinical Forum, Journal Review Presentations, University Hospitals of Cleveland, Cleveland, Ohio. November 19, 1994.

- a. "The accuracy of selective magnetic resonance imaging compared with the findings of arthroscopy of the knee." (journal article review)
- b. "Chronic aortic dissection: comparison of MR imaging and transesophageal echocardiography." (journal article review)

RSNA '94 80th Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 27 - December 2, 1994.

- a. "Interventional thoracic radiology: interventional thoracic procedures." (workshop)

**1995** Society of Gastrointestinal Radiologists, Twenty-Fourth Annual Meeting & Postgraduate Course, Lowes Ventana Canyon Resort, Tucson, Arizona. February 26 - March 3, 1995.

- a. "Exocrine neoplasms of the pancreas." (emphasis course)

American Roentgen Ray Society - 95th Annual Meeting, Sheraton Washington Hotel & Towers, Washington, DC. April 30 - May 5, 1995.

- a. Chairman, Scientific Exhibits Committee
- b. Executive Council member

#### **LECTURES/MEETINGS (CONT.)**

**1995** 18th Annual Course of the Society of Computed Body Tomography & Magnetic Resonance, Grand Hyatt, New York, New York. May 15 - 19, 1995.

- a. Advanced interventional techniques and abdominal intervention: cutting edge." (workshop)

Grand Rounds and Research Conference, Massachusetts General Hospital, Boston, Massachusetts. June 14 - 15, 1995.

Society of Chairmen of Academic Radiology Departments Fall Meeting, Westin Hotel Copley Place, Boston, Massachusetts. September 9 - 10, 1995.

Siemens Medical Systems, Erlangen, Germany, Site Visit. October 15 - 20, 1995.

American Roentgen Ray Society Executive Council meeting, Lansdowne Conference Center, Lansdowne, Virginia. November 11, 1995.

Radiological Society of North America Scientific Program and Annual Meeting, McCormick Place, Chicago, Illinois. November 26 - December 1, 1995.

**1996** Newark Beth Israel Interventional Radiology Conference, Newark Beth Israel medical Center, Newark, New Jersey, March 21, 1996.

- a. New biopsy "tricks" by an old interventional dog.

UHHS Strategic Planning Retreat, Windows on the River, Cleveland, Ohio. April 30, 1996

American Roentgen Ray Society - 96th Annual Meeting, San Diego Marriott Motel and Marina, San Diego, California. May 5-10, 1996.

- a. Executive Council member
- b. Scientific Exhibits Committee chairman
- c. Moderator for Scientific Session 35 - GI: Abdominal CT

Abbott Labs Research Meeting: Thrombolytic Medicine Seminar, Abbott Labs, Abbott Park, Illinois. July 26, 1996.

- a. Abbokinase® in abdominal abscess.

New Jersey Medical School Radiology Department Review, New Jersey Medical School, Newark, New Jersey. September 5 - 6, 1996. Review Team member.

Dartmouth-Hitchcock Medical Center Bicentennial, Dartmouth-Hitchcock Medical Center, Lebanon, New Hampshire. September 26 - 27, 1996. Visiting Professor

- a. Interventional procedures of the 21st century.
- b. Diagnosis and intervention of the pancreas.

American Roentgen Ray Society Executive Council Fall Meeting, Lansdowne Conference Resort, Lansdowne, Virginia. October 18-19, 1996.

Using the Internet for Business: Possibilities & Realities, Weatherhead School of Management, Case Western Reserve University, Cleveland, Ohio. October 30, 1996

#### **LECTURES/MEETINGS (CONT.)**

**1996** Radiological Society of North America - 82nd Scientific Assembly & Annual Meeting, McCormick Place, Chicago, Illinois. December 1 - 5, 1996.

- a. Moderator - RSNA session, "Outcomes, cost analysis, efficacy."
- b. Workshop Instructor, "Experience with intracavitary urokinase for enhancing abscess drainage."
- c. Paper presentation, "Use of intracavitary urokinase to facilitate abscess drainage."

Department of Anatomy Seminar, Case Western Reserve University, Cleveland, Ohio. December 11, 1996.

- a. Interventional procedures of the 21st century.

**1997** Oak Ridge Laboratories, Oak Ridge, Tennessee. January 10, 1997. Facial reconstruction research project funding meeting.

American Roentgen Ray Society, Editorial Policy Committee Meeting, New Orleans, Louisiana. January 11, 1997.

President's Advisory Committee, Case Western Reserve University, Cleveland, Ohio. January 31, 1997.

Visiting Professor, Michigan State University, Lansing, Michigan. February 3 - 4, 1997

- a. Interventional CT.
- b. Pancreatic neoplasm imaging.

Society of Cardiovascular and Interventional Radiology - 22nd Annual Meeting, Washington, DC. March 8 - 13, 1997.

Department of Justice, Washington, DC. March 19, 1997. Research funding meeting for facial reconstruction project.

Society of Computed Body Tomography/Magnetic Resonance - 20th Annual Course, Washington, DC. April 14 - 18, 1997.

- a. The effect of needle size of Tru-cut needles on bleeding & tissue recovery. Donna Plecha - presenter.
- b. Use of intracavitary urokinase to facilitate abscess drainage. Dean Nakamoto - presenter.

**1998** Society of Computerized Body Tomography/Magnetic Resonance Annual Course, 21<sup>st</sup> Annual Course, Rancho Mirage, CA. March 30-April 3.

- a. CT Guided Interventional Procedures

Guilford Pharmaceuticals Baltimore June 12, 1998

- a. Past and Future Perspectives in Minimally Invasive Radiology

Theodore Castele Lecture, The Ritz Carlton Hotel, Cleveland, OH April 20 1998

- a. Interventional Imaging

Radiological Society of North America – 84<sup>th</sup> Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 29<sup>th</sup> – December 4, 1998

- a. Percutaneous Drainage of Abdominal Fluid Collections: Principles and Controversies (How to workshop)
- b. Moderator for GI Interventional Radiofrequency Ablation workshop.

#### **LECTURES/MEETINGS (CONT.)**

**1999** Snowmass Conference, Snowmass, Colorado. February 7 – 11, 1999.

- a. Spiral CT of the Pancreas
- b. Diagnosis and Drainage of Inflammatory Processes
- c. Peritoneal Spaces and Abdominal Ligaments

Society of Cardiovascular and Interventional Radiology – 24<sup>th</sup> annual meeting, Orlando, Florida. March 20 – 25, 1999.

Society of Computed Body Tomography and Magnetic Resonance, New Orleans, LA. April 12 – 15, 1999.

- a. Interventional Imaging
- b. Imaging and Intervention: Current Directions

American Roentgen Ray Society, Executive Council; Scientific Exhibit Committee, New Orleans, LA. May 9 – 13, 1999.

Radiological Society of North America – 85<sup>th</sup> Scientific Assembly and Annual Meeting, McCormick Place, Chicago, Illinois. November 28<sup>th</sup> – December 3<sup>rd</sup>, 1999

- a. Presided at the Gastrointestinal (Interventional, Abdomen) session.

**2000** International Symposium on Multidetector CT, Starnberg, Germany. January 20 – 22nd, 2000.

- a. Image guided procedures for the Millenium
- b. Percutaneous therapeutic procedures.
- c. Spiral/multislice scanning of the pancreas.

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA, March 3 – 5, 2000

National Cancer Institute, Washington DC, 2/29 – 3/1/00

- a. CTEP Drug Development meetings

National Cancer Institute, Washington DC, 3/22/00

- a. Discussion regarding repeated tissue biopsy in early phase drug trials.

Society of Computed Body Tomography and Magnetic Resonance, San Diego, CA April 10-14, 2000.

- a. CT Intervention Procedures
- b. Multislice CT – Vascular Applications

New Orleans Radiological Society, New Orleans May 2 – 6, 2000

- a. CT and MR pancreatic tumor
- b. Inflammatory disease of pancreas
- c. CT and MR guided procedures
- d. Abscess drainage
- e. Multi-slice detective systems

American Roentgen Ray Society, Dulles Washington, May 7 – May 11, 2000

- a. Moderator GI liver/ GI tract

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA 7/6/00-7/7/00

Radiology in Ireland, 9/18/00 – 9/22/00

**LECTURES/MEETINGS (CONT.)**

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA 11/3-11/5/00

Radiological Society of North America, Chicago IL November 26 – 30, 2000

- a. Presidor – Gastrointestinal session
- b. CT-guided Percutaneous Celiac Ganglia Block Using RF thermal ablation for CA pain Manangement.
- c. Computer display with three-axis controller for Robotic assisted interventional Procedures.

**2001** SCVIR, San Antonio, TX March 3- 5, 2001

Central Ohio Radiological Society and Ohio State University Radiology Grand Rounds,  
Columbus, OH March 8 – 9, 2001

- a. Multislice CT of Chest and Abdomen
- b. CT Guided Lung procedures

Society of Computed Body Tomography and Magnetic Resonance, South Beach, FL March 18-20, 2001.

- a. Interventional Techniques

Society of Gastrointestinal Radiology, Scottsdale AZ, March 24-25, 2001

American Roentgen Ray Society, Seattle, WA April 30, 2001 – May 4, 2001

- a. Local use of blood elements to Prevent Bleeding During Percutaneous Interventional Procedures
- b. GI: Pancreas and Spleen

American Roentgen Ray Society, Program Committee Meeting, Leesburg VA July 12-July 14, 2001

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA 11/1-11/3/01

Radiological Society of North America, Chicago IL November 26 – 30, 2001

- a. Presiding Interventional session

**2002** SCBT, Charleston, South Carolina. March 18 – March 22, 2002

- a. International Teleradiology
- b. Panel discussion/questions

SCVIR, Baltimore, MD April 9 – April 11, 2002

- a. Vascular Interventions in the Thorax
- b. Abscess Management

American Roentgen Ray Society, Atlanta GA, April 27- May 3, 2002

American Roentgen Ray Society, Program Committee Meeting, Leesburg VA July 11-12, 2002

#### **LECTURES/MEETINGS (CONT.)**

Radiology In France September 23 – 28, 2002

- a. CT and multislice CT of the pancreatic tumor
- b. CT of Pancreatitis
- c. CT of the acute abdomen
- d. Image Guided Microsurgery
- e. Risk Avoidance during Interventional Procedures

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA 11/1 – 11/3/02

Radiological Society of North America, Chicago IL December 1 – 6, 2002

**2003** Conference 2003 an International Update – January 10 – 13, 2003, Mumbai, India

- a. Multi slice CT of the heart
- b. Interventional CT of the Pancreas

SIR, Society of Interventional Radiology – March 27 – April 1, 2003 Salt Lake City, Utah

- a. Abscess Drainage
- b. Adjuvant Treatment of Tumors by Radiofrequency with 5FU Implants

American Roentgen Racy Society, May 5- May 9, San Diego, CA

Imaging In Japan, May 19 – May 23, Kyoto and Tokyo, Japan

- a. Opening ceremony speaker.

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA July 11<sup>th</sup>

American Roentgen Ray Society, Executive Council Meeting, Leesburg VA, 11/7

Radiological Society of North America, Chicago, IL December Nov 29 – 12/5

- a. Functional CT Monitoring

## **2004**

57<sup>th</sup> Annual Conference of IRIA, Hyderabad, India January 6 – 12, 2004

- a. Computed Tomography of pancreas – a systemic approach
- b. CT guided lung biopsies and its complications
- c. Future directions of Image guided Interventions in Oncology
- d. Percutaneous Treatments for Abscess, Tumors, Anthrax and beyond

American Roentgen Ray Society, Strategic Planning Committee – Leesburg, VA 1/24 – 26

Society of computerized body tomography – March 22-26, Henderson, Nevada

- a. Image guided thoracic intervention
- b. Image guided percutaneous abscess drainage

Society of Interventional Radiology – March 25-30, Phoenix, Arizona

- a. Abscess drainage

American Roentgen Ray Society, May 2 – 7, Miami Beach, Florida

- a. Vascular Review course

Radiological Society of North America, Chicago, IL November 28- Dec.3, 2004

- a. *Submitted abstract*: The effect of carbonic anhydrase inhibitor on contrast enhancement of normal liver compared to untreated tumor.

## **2005**

Society of Interventional Radiology – March 31, 2005 – April 5, 2005, New Orleans

- a. Percutaneous Abscess Drainage

CT-Symposium CT: Radiology's Powerhouse, June 9 – 12, 2005, Berlin, Germany

- a. Image/CT guided therapy

Biolmaging Symposium – November 4, 2005, Memphis, Tennessee

- a. Computed Tomography Imaging

Radiological Society of North America, Chicago, IL November 27-Dec. 1, 2005

- a. Reduction of False Positive PET studies by Vasoconstrictor Modulation of Normal and Angiogenic Tumor Vessels

59<sup>th</sup> Annual Congress of IRIA at Chennai – January 5<sup>th</sup> – 8<sup>th</sup>, 2006, Chennai India

- a. Normal Peritoneum and Abscesses
- b. Pancreatic Neoplasms
- c. CT guided Interventions; 30 years experience.

Medical Advisory Board “Computed Tomography Scanners, March 6, 2006 – Vienna Austria

Society of Interventional Radiologists – March 30 – April 4, 2006, Toronto, Canada

- a. Categorical Course: Embolization 2006: Approaches to the coagulopathic patient.

Stanford Radiology Continuing Medical Education – June 14-17, 2006 – San Francisco, CA

- a. Vasoactive Drugs to Reduce PET/CT False Positives
- b. Tumor Perfusion with and without Vasoactive Drug Enhancement
- c. CT BX with MDCT scanners

SPORE Investigators Workshop, NCI – July 16-19, 2006 - Baltimore, Washington

- a. Image-guided Serial Tissue Acquisition

Radiological Society of North America, Chicago, IL November 26 – December 1, 2006

- a. Refresher Course: Imaging Opportunities in Clinical Trials – Interventional Oncology Therapies: From Concept to Delivery.
- b. Refresher Course: Pharmacologic Alteration of Blood Flow to Enhance Percutaneous Image-guided Intervention.

## **2007**

SCBT – MR, Society of Computed Tomography and Magnetic Resonance.

Cum Laude Award for an outstanding Scientific paper on Cross Sectional Imaging  
Orlando, Florida, March 2007.

Radiological Society of North America, Chicago, IL November 24 – 30, 2007

## **2008**

AIUM – March 10 – 14, 2008 San Diego, CA

- a. Categorical Course: Difficult Percutaneous Biopsies.

Society Of Interventional Radiology – March 15 – 19, 2008, Washington, DC

- a. Workshop: Abscess Management

Radiological Society of North America, Chicago, IL November 30 – December 4