RADIOLOGY LETTER

A Radiologist's Approach to Imaging Vistas — *Stony Brook University* — *Spring 2003*

Multi-Slice Scanner

By Charles Mazzarese, L.R.T.

TH Medical Radiographer/Assistant Director

The year of 2003 will be an exciting one for the Cat Scan Department. The purchase of three new General Electric multi-slice CT scanners will enable us to venture into cutting edge technology, allowing for superior patient care and diagnosis (Figures 1a and 1b). The Emergency Room CT scanner was the first to be replaced, and installation of the other scanners will follow shortly.

The CT scanner is a unique light speed plus computed tomography system with a user interface, built-in protocols and sophisticated post processing capabilities, which reduces total patient exam time. The unit enables single-technologist operation and greater department productivity.

The multi-slice scanner uses 20%-30% less Ma to acquire the data resulting in fewer tube cooling delays and more efficient use of the x-ray tube. Long continuous scans are increasingly important in CT angiography and trauma studies where tube cooling limitations cannot be tolerated. With the multi-slice system, we can acquire thinner slices for better image quality while keeping throughput at an optimal level. Due to the speed of the system and fast acquisition time, many studies (Figure 2) can be performed in a single breath hold, reducing motion artifact especially in uncooperative patients. One of the major benefits of multi-slice scanners is the ability to reconstruct multiple slice thicknesses from one data acquisition. The addition of these scanners allows us to accurately post process the data sets for superb 3D (Figure 3) analysis. Upon completion of this project, we will be providing state-of-the-art imaging to our patients and their referring physicians.

HIGHLIGHTS

Figure 1a. Aortic Runnoff

Figure 1b. Renal Angiogram

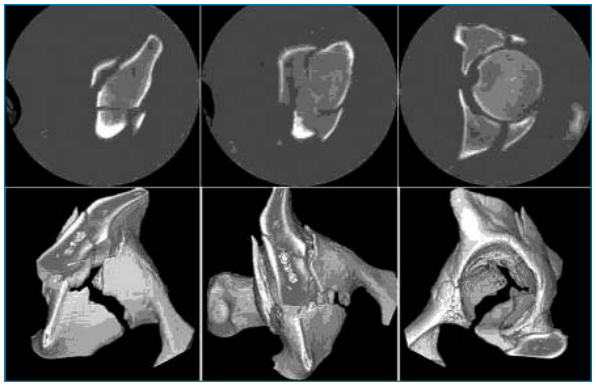

Figure 2. Fractured Hip

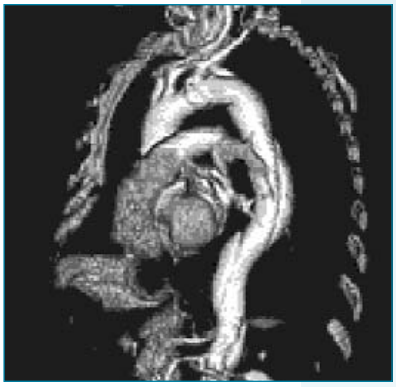

Figure 3. Aortic Dissection

Charles Mazzarese, L.R.T. speaks with patient before CT exam

Janet Love, R.T. displays monitors used for reading images of CT scans

STONY BROOK
STATE UNIVERSITY OF NEW YORK

Chairman's Corner

by Donald P. Harrington, M.D., F.A.C.R.

It is hard to believe but we have just received word on the match for our Residency Program and another spring is upon us. This is always an exciting time that has capped off months of hard work by our dedicated group of faculty and staff. I want to personally thank Dr. Steven Perlmutter, our Residency Program Director and the Residency Committee — Steven Perlmutter, MD, Thomas Smith, MD, Patricia Roche, DO and John Ferretti, MD, as well as our Residency Program Coordinator, Jerri Christiano, who retired in February and Linda Erickson who took over our program without skipping a beat. I would like to also thank our residents and faculty that assisted the Committee with the interview process, and participated in gatherings of candidates and tours of the Department. It was truly a departmental effort.

I believe the results have paid off dramatically. We offered five residency positions in the Match and filled all five positions with candidates of our choice. One physician was from Stony Brook and the other four candidates were from medical schools in the Northeast.

The year 2003 will mark a major equipment expansion for the Radiology Department by the commitment of resources by the Hospital and in particular by the Chief Executive Officer, Bruce Schroffel. We will have a state-of-the-art PACS system, (a first in the metropolitan area), a CT/angiography room, several new multi-slice CT machines, two new MRIs, including a 3 Tesla machine that will be used for research and will be available for clinical imaging when appropriate. I look forward to reporting back to you in future issues in regard to our progress, as we remain the leading institution for state-of-the-art radiology with subspecialty interpretation.

This issue highlights all of the exciting work that our faculty and staff perform outside the campus of Stony Brook as they contribute to the future of radiology via their committees, presentations, etc. Also in this issue are the publications of our faculty and staff for 2002. I am sure that you join me in expressing a well-deserved thank you for their hard work and dedication.

THE RADIOLOGY LETTER

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Donald P. Harrington, M.D.	*Chairman*
Michael J. Cortegiano	*Administrator*
Christine R. Hubbard	*Editor and Staff Writer*

A Fond Farewell

We all wish Jerri Christiano a happy and healthy retirement. Jerri worked in the department for over 22 years and took on the position of Residency Coordinator since the inception of the Program in 1981. Jerri and her husband, Pete, are enjoying the sun at their new location in Hilton Head, South Carolina.

Managed Care Update

Aetna Healthcare
Aetna US Healthcare
American Medical & Life
APA Partners
(formerly HHS)
BCE emerges
(formerly Up and Up)
Beech Street
BC/BS Managed Care Network
(HealthChoice, Child Health Plus, Empire Fed Emp, Empire Deluxe, Blue Choice Sr. Plan)
Cambridge
CIGNA
(HMO, Open Access PPO)
First Health
GHI
(HMO, PPO (Flex Select)
HealthFirst
(HMO, 1199, Medicaid, Child Health Plus, Family Health Plus, Health First NY)
HIP
(HMO, Heritage, Hip Access, VIP, Prime, Medicaid, Child Health Plus, DCN)
Horizon
(HMO, Vista, Vista Plus, PPO, Standard, Standard Plus)
Island Group Administrators
J.J. Newman
Local 1199 National Benefits Fund
(Members Choice)
Magna Care
MDNY
(Select, Direct HMO/POS, Classic HMO/POS, Focus/Flex)
Medichoice
Metropolitan Empire
Multiplan
Oxford
(Liberty and Freedom)
Sierra
Suffolk Health Plan
United Healthcare
US Healthcare
USI
(formerly Select Pro)
Vytra Healthcare
(HMO, Suffolk County, East End Health Plan, Direct Access HMO, Central Suffolk Hospital, Southampton Hospital, Southside Hospital, Smart Start Neighborhood Network Plan, Suffolk Employees School Health Plan)

New Faculty

Steven Perlmutter, M.D., F.A.C.R. joined the faculty as an Assistant Professor of Radiology in the Division of Diagnostic Radiology and Cross-sectional Imaging and is Director of the Radiology Residency Program. Dr. Perlmutter received his medical degree from the State University of New York Downstate Medical Center, followed by a Medical internship at the State University Hospital and Kings County Hospitals. A Nuclear Medicine residency followed his Diagnostic Radiology residency at New York Hospital-Cornell University Medical Center & Memorial Sloan-Kettering Cancer Center at New York Hospital-Cornell University Medical Center. He was an attending radiologist and Chief of Ultrasound at Brookhaven Memorial Hospital for 13 years and then he moved to Winthrop-University Hospital for 11 years. There he was Chief of Ultrasound and Chief of Genitourinary Radiology and has served as Acting Director of Breast Imaging. Dr. Perlmutter is Board Certified in Diagnostic Radiology and Nuclear Medicine. He is a former President of the Long Island Radiological Society and the immediate Past-President of the New York State Radiological Society. Dr. Perlmutter is Chairman of the American College of Radiology's Committee of the Chapters, Vice-Chairman of the Medical Society of the State of New York's Health Care Delivery Systems and Medicaid Committee and Chairman of Suffolk County Medical Society's Workers Compensation Committee. He earned "Teacher-of-the-Year" awards at Brookhaven Memorial Hospital and from the Radiology Department at Winthrop-University Hospital.

Elaine S. Gould, M.D. joined the faculty as an Associate Professor of Radiology in the Section of Musculoskeletal Radiology and is Chief of Musculoskeletal Radiology. Dr. Gould received her medical degree from the State University of New York Downstate Medical Center, followed by a Medical internship and a first year Diagnostic Radiology residency at Winthrop University Hospital in Mineola, New York. She completed her last three years of Diagnostic Radiology residency at the State University of New York at Stony Brook at which time she was Chief Resident during the last two years. Dr. Gould did a Skeletal Radiology fellowship at The Hospital for Joint Diseases-Orthopaedic Institute in New York, New York. She was an attending radiologist at North Shore University Hospital - Cornell Medical College where she was Physician-in-Charge of the Section of Musculoskeletal-Orthopaedic Radiology. Before coming to Stony Brook, Dr. Gould worked at the Advanced Medical Imaging of Long Island, P.C. She is Board Certified and is a member of the American Association of Women Radiologists, American College of Radiology, American Medical Association, American Roentgen Ray Society, Long Island Radiological Society, Medical Society of the State of New York, Nassau Academy of Medicine, Nassau County Medical Society, New York State Chapter of the American College of Radiology, Radiological Society of North America, Society for Magnetic Resonance Imaging and The International Skeletal Society.

Welcome

Welcome to our new Residency Coordinator Linda Erickson. Linda is a familiar face to many of us as she previously worked in the Office of Medical Education.

Grand Rounds

Ellen Wolfe, M.D. presented a Grand Rounds on February 11, 2003 on "Imaging of the Biliary Tree and Pancreatic Duct". Dr. Wolfe is Professor of Clinical Radiology at the Albert Einstein College of Medicine and Vice Chairman of Radiology and Chief of GI at the Montefiore Medical Center in the Bronx, New York.

Celebration of Newly Renovated Medical Imaging Labs

A dedication to the newly renovated Medical Imaging Labs took place this past fall.

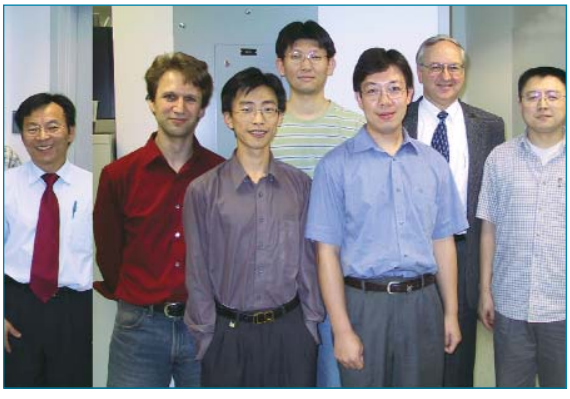
On September 23, 2002, the Department of Radiology celebrated the opening of the newly renovated Medical Imaging Labs with a lecture series, Grand Rounds talk, and party. The labs, located on the 8th floor of the Health Science Center, were started in 1992 when **Gene Gindi, Ph.D.** (Associate Professor of Radiology and Electrical Engineering) came from Yale University and **Jerome Liang, Ph.D.** (Professor of Radiology and Computer Science) joined him from Duke University. Since then, the Labs have grown considerably, and now house more than five Postdoctoral Associates and more than ten graduate students. The research covers a wide spectrum in Medical Imaging, i.e. from image formation and processing to visualization. Two examples, both of which have attracted industrial as well as research interest, are virtual colonoscopy for screening of colonic polyps and low-dose computer tomography (CT) for CT screening of heart, lungs, and breast.

Craig Malbon, Ph.D., Vice Dean for Scientific Affairs of the School of Medicine, and **Donald Harrington, M.D.,** Chairman Department of Radiology, initiated the dedication with opening remarks. It was followed by a series of lectures: (1) *Medical Imaging Informatics* by Jerome Liang, Ph.D. (2) *Reconstruction and Image Quality in Nuclear Medicine and CT Mammography* by Gene Gindi, Ph.D., (3) *PET Imaging Research at Brookhaven National Labs (BNL)* by Joanna Fowler, Ph.D., BNL Scientist, (4) *Optical Coherence Tomography* by Yingtian Pan, Ph.D., Assistant Professor of Biomedical Engineering, (5) *Breast Imaging Research* by Terry Button, Ph.D., Associate Professor of Radiology, and (6) *Interactive Visualization and Colorization of Volumetric Medical Image Data* by Klaus Mueller, Ph.D., Assistant Professor of Computer Science. The Grand Rounds talk was then presented by a distinguished researcher/clinician, **Michael Vannier, M.D**., Professor of Radiology, Iowa University Medical College, and Editor-in-Chief of the IEEE Transactions on Medical Imaging, a number one journal in its field. His talk, entitled *Image-Guided Magnetic Surgery*, showed some fascinating progress in the use of external magnetic fields to precisely guide magnetically tipped catheters in a variety of medical applications.

After the talks, a grand-opening celebration was held in the newly renovated 8th floor Labs. More than forty colleagues from BNL, Applied Mathematics, Biomedical Engineering, Computer Science, Electrical Engineering, Physics, Radiology and other clinical departments attended the party.

(From left: Gene Gindi; Jerome Liang; Donald Harrington; and Michael Vannier)

(From left: Yuxiang Xing, Electrical Engineering Student; Daria Eremina, Applied Math Student; Hongbing Lu, Radiology Researcher; Jing Wang, Physics Student)



(From left: Jerome Liang, PhD; Klaus Mueller, PhD; Tiangfang Li, Physics Student; Junhai Wen, PhD, Radiology Researcher; Xiang Li, PhD, Radiology Researcher; Michael Vannier; Zigang Wang, PhD, Radiology Researcher)

2002 Academic Achievements

ABSTRACTS

Cohen HL. The genitourinary system. Lecture. Fetal and neonatal ultrasound: correlations across a life border (Categorical Course). AIUM Annual Convention. Nashville, March 2002. Abstract in Journal Ultrasound Med 21:S37, 2002.

Cohen HL. The acute scrotum. Lecture. Topics in emergency ultrasonography (Categorical Course). AIUM 2002 Annual Convention. Nashville, March 2002. Abstract in Journal Ultrasound Med 21:S95, 2002.

Fowler, JS, Logan J, Wang GJ, Volkow ND, Zhu W, **Franceschi D,** Pappas N, Ferrieri RA, Shea C, Garza V, Xu Y, MacGregor RR, Schlyer DJ, Ding YS, Alexoff D. PET imaging of monoamine oxidase B in peripheral organs in humans. Brookhaven National Laboratory, Upton, NY; SUNY Stony Brook, Stony Brook NY.

Logan J, Fowler, J, Ding YS, **Franceshi D,** Wang GJ, Volkow N, Schlyer DJ, Gatley SJ, Alexoff D, Felder C, Zhu W. A strategy for the formation of parametric PET images of the irreversible MAO A tracers ^{11}C-clorgyline and deuterium substituted ^{11}C-clorgyline. State University of New York at Stony Brook, Stony Brook, NY.

Li X, Li L, Huang W, Christodoulou C, **Roque C, Roche P, Peyster R,** Krupp L, and **Liang Z.** A volumetric analysis on central cerebral atrophy for multiple sclerosis studies with cognitive impairment. Proc. RSNA pp429.

Lu H, Wen J, Li X, and **Liang Z.** A non-iterative solution for quantitative myocardial perfusion SPECT reconstruction with non-uniform attenuation and distance-dependent spatial resolution. The 49th Annual Meeting of the Society of Nuclear Medicine. JNM 43:105.

Wax M, Chen D, Lakare S, **Liang Z,** and Collins C. Optimizing laxative free virtual colonoscopy. Proc. RSNA pp585.

Wen J, Li T, Li X, Liang Z. Fan-beam and variable-focal-length van-beam SPECT reconstruction with non-uniform attenuation. The 49th Annual Meeting of the Society of Nuclear Medicine. JNM Tech 30:97.

AWARDS

Harris L. Cohen, M.D.

Editors Certificate of Recognition–Radiographics for Manuscript Review

Editors Certificate of Recognition–Radiographics for RSNA Exhibit Reviews

Who's Who in America

Editor's Certificate of Recognition-Journal of Women's Imaging

American Institute of Ultrasound in Medicine (AIUM) Plaque for Service as member of Board of Governors

William McSweeney MD Memorial Lectureship-Children's Medical Center

Paul R. Fisher, M.D.

Educational award for responsibility in educating the medical students and his commitment to assume this responsibility and serve on key academic committees.

Wei W. Huang, Ph.D.

Recipient of the Carol M. Baldwin Breast Cancer 2002 Research Award for the "Advanced MR Scanning Protocol for Improved Specificity in Detection of Breast Malignancy".

Roxanne B. Palermo, M.D.

Listed in "Guide to America's Top Radiologists" 2002-2003 Edition by Consumers' Research Council of America www.consumersresearchncl.org

Steven Perlmutter, M.D.

Certificate of Merit Award for Scientific Exhibit at American Roentgen Ray Society

COURSES TAUGHT

Harris L. Cohen, M.D.
(Course Director)

Diagnostic Ultrasound in Emergency Medicine Evaluations. Brookdale University Hospital. New York Feb 2002.

Michael J. Cortegiano, M.D.

(Adjunct Professor)

Managerial Accounting and Finance. Polytech University. Westbury, New York. fall 2002.

Gene R. Gindi, Ph.D.

Co-taught BME 503 Diagnostics in Medicine at SUNY Stony Brook.

Donald P. Harrington, M.D.

(Adjunct Professor)

Introduction to Powerscribe Basic Skills. RSNA 2002 88th Scientific Assembly.

Introduction to Powerscribe Basic Skills. RSNA 2002 88th Scientific Assembly.

Medical Informatics. Columbia University Medical Center. New York. spring and fall semester 2002.

Jerome Z. Liang, Ph.D.

Co-taught BME 503 Diagnostics in Medicine at SUNY Stony Brook.

EDITORSHIP

Harris L. Cohen, M.D.

Editorial Advisory Board - Journal of Diagnostic Medical Sonography

Editorial Board - Journal of Diagnostic Medical Sonography

Editorial Board - Journal of Women's Imaging

Editor-in-Chief - Journal of Medicine

Editor-in-Chief - (PSE) Physician Self Evaluation Series, ACR Syllabus Series

Editorial Board - Journal of Ultrasound in Medicine

Medical Editor - Radiology eMedicine

Editorial Board - Ultrasound Quarterly

Steven Perlmutter, M.D.

Medical Editor for the Radiology Book in eMedicine Project (www.emedicine.com)

EXHIBITS AND PRESENTATIONS

Cora J. Cabahug, M.D.

Variability of the FDG uptake in the palatine tonsils. Annual Congress of the European Association of Nuclear Medicine. September 2002.

Harris L. Cohen, M.D.

The genitourinary system. Lecture. Fetal and Neonatal Ultrasound: Correlations Across a Life Border (Categorical Course). AIUM Annual Convention. Nashville, March 2002.

The acute scrotum. Lecture. Topics in Emergency Ultrasonography (Categorical Course). AIUM 2002 Annual Convention. Nashville, March 2002.

Prenatal ultrasound: CNS. Lecture. Postgraduate Course-Postnatal Imaging. Society for Pediatric Radiology Annual Meeting. Philadelphia. May 2002.

Pediatric and adolescent gynecologic ultrasound. Lecture. William McSweeney Memorial lecture. Children's National Medical Center. Washington DC. May 2002.

Obstetrical ultrasound. Lecture. 4th Annual Comprehensive Obstetrics and Gynecology Review Course. Department of Obstetrics and Gynecology. SUNY-Downstate. Brooklyn. June 2002.

Gynecologic ultrasound in the pediatric and adolescent patient. Lecture. Society of Radiologists in Ultrasound. 12th annual meeting. San Francisco. October 2002.

Evaluation of the newborn. Plenary session. Fetal congenital anomalies: state of the art. Lecture. 12th World Congress on Ultrasound in Obstetrics and Gynecology. International Society of Ultrasound in Obstetrics and Gynecology. New York. November 2002.

Essentials in obstetrical, fetal and pediatric ultrasound. Essential in Radiology Course. 88th annual meeting. RSNA. Chicago. December 2002.

Michael J. Cortegiano

Physician Productivity - AAARO Report. Scard Fall Meeting. September 2002.

Academic Track - if you don't know where you are going, any road will get you there. Fall Educational Conference. October 2002.

Dinko Franceschi, M.D.

Variability of the FDG uptake in the palatine tonsils. Annual Congress of the European Association of Nuclear Medicine in Vienna. September 2002.

Donald P. Harrington, M.D.

Research - Starting from Scratch. SCARD Chair Orientation in Miami, Florida. September 2002.

Finance - Creating a Budget. SCARD Chair Orientation in Miami, Florida. September 2002.

Steven Perlmutter, M.D.

Eisenstat RS, Lane MJ, Friedman RM, **Perlmutter S,** Katz DS. **CT Imaging of the Perinephric Space.** 102nd annual meeting of the American Roentgen Ray Society, April 28 - May 3, 2002, in Atlanta, GA.

Perlmutter S, Brusca GT, Katz DS. **Imaging Of The Urinary Bladder.** American Roentgen Ray Society, to be held April 28 - May 3, 2002, in Atlanta, GA.

Katz DS, Sussman A, Gittleman AM, Hsu C, Gold BM, **Perlmutter S,** Glanz S. **Breast Pathology Depicted on CT: Spectrum of Incidental and non-Incidental Findings.** American Roentgen Ray Society, April 28 - May 3, 2002, in Atlanta, GA. Awarded Certificate of Merit.

Badler RL, Katz DS, Lummerman JH, Pollack S, **Perlmutter S,** Gittleman AM, Lane MJ. **Incidence and Distribution of Renal Pyramidal Calculi on Unenhanced Helical CT in Patients with Suspected Renal Colic.** 102nd annual meeting of the American Roentgen Ray Society, April 28 - May 3, 2002, in Atlanta, GA.

Price AP, Hanna MK, Luchs JS, **Perlmutter S.** Katz DS. **Congenital Giant Megaureter: A Pseudoseptated Mass.** Society of Pediatric Radiology, April 27-May 1, 2002, Philadelphia, Pennsylvania.

Katz DS, Sussman A, Gittleman AM, Hsu C, Gold BM, **Perlmutter S. Breast Pathology Depicted on CT: Spectrum of Incidental and Non-Incidental Findings.** Exhibit at RSNA, December 1-6, 2002.

Perlmutter S. Thyroid Glands, Sonograms, and Diagnostic Plans. Exhibit at RSNA, December 1-6, 2002.

Price AP, Hanna MK, Luchs JS, **Perlmutter S,** Katz DS. **Congenital Giant Megaureter: A Pseudoseptated Mass.** Accepted for the 103rd annual meeting of the American Roentgen Ray Society, to be held May 4-9, 2003, in San Diego, CA.

GRAND ROUNDS

Harris L. Cohen, M.D.

Prenatal ultrasound: CNS. Lecture. Postgraduate Course-Postnatal Imaging. Society for Pediatric Radiology annual meeting. Philadelphia.

Pediatric and adolescent gynecologic ultrasound. Lecture. William McSweeney Memorial lecture. Children's National Medical Center. Washington DC. May 2002.

Obstetrical ultrasound. Lecture. 4th Annual Comprehensive Obstetrics and Gynecology Review Course. Department of Obstetrics and Gynecology. SUNY - Downstate. Brooklyn. June 2002.

Gynecologic ultrasound in the pediatric and adolescent patient. Lecture. Society of Radiologists in Ultrasound. 12th annual meeting. San Francisco. October 2002.

Evaluation of the newborn. Plenary session. Fetal congenital anomalies: state of the art. Lecture. 12th World Congress on Ultrasound in Obstetrics and Gynecology. New York. November 2002.

Essentials in Pediatric Ultrasound. Essential in Radiology Course. 99th annual meeting. RSNA. Chicago. December 2002.

Pediatric and adolescent gynecologic ultrasound. Visiting Professor, Boston Children's Hospital. November 2002

Gene R. Gindi, Ph.D.

Reconstructed Image Quality in SPECT. University of Massachusetts Medical Center in Worcester, MA. December 2002.

OFFICE OR COMMITTEE ACTIVITY IN SOCIETIES

Harris L. Cohen, M.D.

American Institute of Ultrasound in Medicine
AIUM Committee - Council on Sections Co-Chairman, Emergency Ultrasound Section
AIUM Committee - Vice Chair, Constitution Committee
American Board of Radiology
Oral Board Examiner
Radiological Society of North America
Exhibit Committee - Pediatric Radiology
American College of Radiology
Expert Panel in Pediatric Imaging
Expert Panel in Ultrasound
Task Force on Disaster Planning
Commission on Ultrasound
Committee on Research and Technology Assessment
Commission on Education
Committee on Education

John A. Ferretti, M.D.

Long Island Radiological Society
Alternate Councilor to American College of Radiology
Long Island Radiological Society
Member, Executive Committee
New York State Radiological Society
Member, Interventional Radiology Committee Ad Hoc
New York State Radiological Society
Continuing Education Committee

Donald P. Harrington, M.D.

New York State Radiological Society
Member, Electronic Communication Ad Hoc
New York State Radiological Society
Panel Member of Radiology Practices
Radiological Society of North America
Member, Electronics Communications Committee
Society of Chairman of Academic Radiology Departments
Member, Executive Committee and President Elect

Gene R. Gindi, M.D.

SPIE Medical Imaging
Member, Program Committee
NSS/MIC Medical Imaging
Member, Program Committee

Steven S. Perlmutter, M.D.

American College of Radiology
Chair, Committee of the Chapters, and Alternate Councilor
Long Island Radiological Society
Member, Executive Committee and Chair, Bylaws Committee
Medical Society of the State of New York
Vice Chair, Committee on Healthcare Delivery and Medicaid
Member, Workers' Compensation & Occupational Health Committee
New York State Radiological Society
President
New York State Workers' Compensation Board
Workers' Compensation Advisory Committee
Society of Radiologists in Ultrasound
Member, External Affairs Committee
Suffolk County Medical Society
Chair, Workers Compensation Committee and Member, Board of Directors

Clemente T. Roque, M.D.

Long Island Radiological Society
Secretary and Member, Executive Committee
Electronic Education Committee
Review of lectures for CME for web

Robert G. Peyster, M.D.

American Society of Neuroradiology
Electronic Education Committee

RADIOLOGY PUBLICATIONS 2002

Button T, Dulaimy K, Fisher P, O'Hea B, Merriam L, **Geronimo V, Huang W.** Addition of ^{1}H MRS and perfusion MRI to conventional dynamic contrast MRI improves specificity in detection of breast malignancy. Proc. Intl. Soc. Magn. Reson. 2002:1:5:579.

Benson J, Bishop M, **Cohen HL.** Intracranial neonatal neurosonography: an update. Ultrasound Quarterly 2002:18:89-114.

Heck DV, Gaillous P, **Cohen HL**. Clatterbuck RE, Tamargo R, Avellino AM, Murphy KP. Choroid plexus arteriovenous malformation presenting with intraventricular hemorrhage. J Pediatr 2002:141:710-1.

Spevak M, **Cohen HL.** Ultrasonography of the adolescent female pelvis. Ultrasound Quarterly 2002:18:275-288.

Cortegiano MJ. Academic radiology productivity - a national benchmark 2001 - fifth annual study report. RBMA Bulletin July/August 2002 pp 18-22.

Volkow ND, Chang L, Wang GJ, Fowler JS, **Franceschi D,** Sedler MJ, Gatley SJ, Miller E, Hitzemann R, Din YS, Logan J. Loss of dopamine transporters in methamphetamine abusers recovers with protracted abstinence. JNeurosc 2001 Dec 1:21 (23):9414-8.

Fowler JS, Logan J, Wang GJ, Volkow ND, Zhu W, **Franceschi D,** Pappas N, Ferrieri R, Shea C, Garza V, Xu Y, MacGregor RR, Schlyer D, Gatley SJ, Ding YS, Alexoff D. PET imaging of monoamine oxidase B in peripheral organs in humans. JNucl Med 2002 Oct:43(1):1331-8.

Logan J, Fowler JS, Ding YS, **Franceschi D,** Wang GJ, Volkow ND, Felder C, Alexoff D. Strategy for the formation of parametric images under conditions of low injected radioactivity applied to PET studies with irreversible monoamine oxidase A tracers ^{11}C-clorgyline and deuterium substituted ^{11}C-clorgyline. J Cereb Blood Flow Metab 2002 Nov:22(1):1367-76.

Hsiao I, Rangarajan A, **Gindi G.** Joint MAP Bayesian tomographic reconstruction with a gamma mixture prior. IEEE Trans Image Processing, vol. 11, p. 1466-1478, Dec 2002.

Hsiao I. Rangarajan A, **Gindi G.** A new convergent MAP reconstruction algorithm for emission tomography using ordered subsets and separable surrogates. 2000 IEEE Intl Symposium on Biomedical Imaging. Washington DC. pp. 409-412, July 2002.

Xing Y, **Gindi G.** Rapid calculation of detect ability for Bayesian SPECT. 2002 IEEE Intl Symposium on Biomedical Imaging. Washington DC. pp 78-80, July 2002.

Khurd P, Xing Y, Hsiao I and **Gindi G.** Fast preconditioned conjugate gradient reconstruction for 2D SPECT. Intl Symposium on Nuclear Science and Medical Imaging, Norfolk VA, 2002.

Hsiao I, Rangarajan A, **Gindi G.** A smoothed I-divergence OSEM-like reconstruction algorithm for emission tomography. SPIE Proc on Medical Imaging: Image Processing. Vol. 4684, pp 10-19, Feb 2002.

Huang W, Christodoulou C, **Li L, Tudorica A, Li X, Roche P,** Scherl W, **Peyster R, Roque C,** Melville P, **Geronimo V, Liang Z** and Krupp L. Correlation studies of multiple sclerosis using ^{1}H MRS, volumetric MRI and cognitive test. Soc Magn Reson Medicine 2002:2:595.

Huang W, Christodoulou C, **Li L, Tudorica A, Li X, Roche P,** Scherl W, **Peyster R, Roque C,** Melville P, **Geronimo V, Liang Z,** and Krupp L. Correlation studies of multiple sclerosis using ^{1}H MRS, volumetric MRI, and cognitive test. Proc. Intl. Soc. Magn. Reson. Med. 2002:1:595.

Huang W, Roche P, Button T, Shindo M. *In Vivo* ^{1}H MR spectroscopic study of thyroid lesions: correlation with pathology. Proc. Intl. Soc. Magn. Reson. Med. 2002:1:570.

Lakare S, Chen D, **Li L, Kaufman A, Liang Z.** Electronic colon cleansing using segmentation rays for virtual colonoscopy. SPIE Medical Imaging 2002:4683:412-418.

Li L, Chen D, Lakare S, Kreeger K. Bitter I, **Kaufman A, Wax M,** Djuric P, and **Liang L.** An image segmentation approach to extract colon lumen through colonic material tagging and hidden markov random field model for virtual colonoscopy. SPIE Medical Imaging 2002:4683:406-411.

Li L, Li X, Huang W, Christodoulou C, Chen D, **Tudorica A,** Djuric P, Krupp L and **Liang Z.** A novel mixture-based segmentation algorithm for quantitative analysis of multiple sclerosis using multi-spectral MR images. Soc Magn Reson Medicine 2002:1:345.

Li L, Lu H, Li X, Huang W, Christodoulou C, Krupp L, and **Liang Z.** Accuracy and repeatability in volumetric analysis of multiple sclerosis using multispectral MR images. 2002 Conf Record IEEE NSS-MIC in CD-ROM.

Li T, Wen J, and **Liang Z.** Compensation for non-stationary detector response in analytical varying focal-length fan-beam SPECT reconstruction. 2002 Conf Record III NSS-MIC in CD-ROM.

Li X, Wang Z, Lu H, Liang Z. Automated segmentation of 3D ultrasound carotid images based on geometrically deformable model with automatic merge capability. SPIE Medical Imaging 2002:4684:1458-1463.

Wan M, **Liang Z,** Ke Q, Hong L, Bitter I and **Kaufman A.** Automatic centerline extraction for vrtual colonoscopy. IEEE Trans Medical Imaging, November Issue 2002:21:1450-1460.

Liang Z, Wang Z, Li L, and **Harrington DP**. Feature-based approach toward computer aided detection and diagnosis - an application to virtual colonoscopy. Computer Assisted Radiology and Surgery 2002:755-763.

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REVIEWER

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Abdominal Imaging
AIUM abstract review chair for Emergency Ultrasound
American Journal of Radiology (AJR)
Archives of Internal Medicine
eMedicine (internet journal)
Journal of Clinical Ultrasound
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American Journal of Neuroradiology
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Review of lectures for CME for web broadcast

VISITING PROFESSOR

Harris L. Cohen, M.D.

Pediatric and adolescent gynecologic ultrasound, Topics in perinatal genitourinary system evaluation, US analysis of the vomiting neonate. Boston Children's Hospital Radiology November 2002

INVITED PROFESSOR

Dinko Franceschi, M.D.

Positron Emission Tomography (PET) in Thyroid Cancer. International Course on Thyroid Surgery, September 2002.

POSTER

Rangarajan A, Hsiao I, **Gindi G.** A smoothed I-divergence prior for tomographic reconstruction. SIAM Conference on Imaging Science. Boston, March 2002.

RADIOLOGY LETTER

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