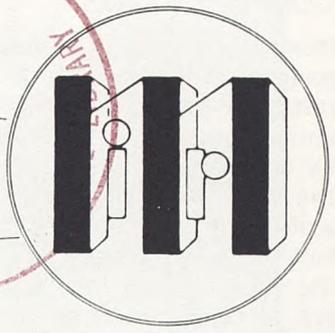


SHELVED IN ARCHIVES

MAR 21 1977



FOCAL SPOT

A NEWSLETTER OF MALLINCKRODT INSTITUTE OF RADIOLOGY

VOLUME V

SPRING 1976

NUMBER 15

THE STORY AT MIA

Mallinckrodt Institute's earliest approach to computer application was in the area of patient treatment planning in 1967, when Radiation Oncology installed their first in-house computer, a Spear P.C. Up to this time the treatment planning had been calculated by hand. A cancer patient requires planning so that the tumor receives the maximum radiation effect and the surrounding tissue the minimal effect. Radiation Oncology Dosimetrists, (or Treatment Planners) Helen Fotenos and Susan Tait, make a cross section contour of the affected region of the patient and feed this contour, with the tumor location and size into a computer. The dosimetrists then feed into the same computer information about the radiation beams of the various therapy machines, enabling the computer to project on a screen the outline of the patient with the therapy beams superimposed.

"We watch the screen," says Helen Fotenos, "as we manipulate the beams and when we have what we think is the optimum configuration, the computer

prints out a diagram showing the dose to various regions in the contour. On the basis of these readouts, corrections and beam configuration refinements can be made." Implanted radioactive sources are also used to treat tumors and the I.B.M. 360 computer facility on the main campus is utilized for calculating dose distribution around the implanted sources.

TREATMENT PLANNING EXTENDED TO OUTSIDE HOSPITALS

In addition to treatment planning for approximately 1433 patients a year, Mallinckrodt dosimetrists provide this service to a number of outside hospitals. Physicians send information on contour and tumor location by telephone and the finished treatment plan for their own machines is sent back by phone.

In 1968, the Division of Nuclear Medicine linked two gamma cameras to a small digital computer, the PDP/12 to improve the quality of radionuclide scans. The computer was programmed to correct for the

COMPUTER STORY

lack of radionuclide scans. The computer was programmed to correct for the lack of uniformity resulting from the complex camera electronics. The computer is used to determine how well lungs work by comparing blood flow to regions of the lungs with the ventilation of these same regions. It also has the ability to compare the function of each kidney by following the passage of a radioactive isotope through the kidneys and into the bladder and to quantitate left to right cardiac shunts. The efficiency with which the heart is contracting can be calculated by the computer's taking pictures from the gamma camera at certain moments during a heart-beat.

COMPUTER UTILIZED IN CLINICAL AND RESEARCH OPERATIONS

Radiation Oncology at MIR has extended the use of the computer to most aspects of its clinical and research operations. Since 1973, Dr. Palmer Steward of the Section of Cancer Biology has utilized a PC 12/7 computer to simulate the response of normal and malignant tissue to chemotherapy and radiation therapy. The system is also used by other members of the Section in analyzing data from their experiments.

In 1968 a tumor registry system was brought up on the main campus computer facility. In 1973 a small Artonix PC-12 based MUMPS system was installed in the ground floor of MIR and many aspects of clinical operation (scheduling, billing, etc.) were then computerized. In early 1974, the seven thousand patients which had previously accessioned into the main campus computerized tumor registry were transferred to the in-house MUMPS computer system. Under the direction of Don P. Ragan, Ph. D., the present applications efforts cover three areas. The first system contains all financial budgetary information and a ledger of all requisitions drawn on Radiation Oncology monies.

Dr. Ragan explains, "The second application area (where the major impact of the information system is felt) includes such functions as the scheduling of patients for therapy machines and for their follow-up appointments. From this operation, therapy machine schedules, dispatch schedules, doctors' schedules, alphabetical lists of patients, and clinical summaries are generated. There is also the patient queue which lists all patients in the department presently waiting to be treated in a real-time fashion. This is similar to the TWA airline scheduling system operating at most airports."

The third area covered by the information processing system, the research patient information data

base, currently consists of over 13,000 patients with information dating from as far back as 1949. Initial information, follow-up information, and some special study information is maintained on all patients seen in radiation therapy.

With typically seventeen users on simultaneously during the day, the PC 12/7 MUMPS system is capable of interfacing to over thirty terminals with twenty-four active users on at any time.

INFORMATION PROCESSED ON 150,000 PATIENT VISITS

Under the guidance of Dr. Gilbert Jost and Mr. Rex Hill, Mallinckrodt Institute installed a Digital Equipment Corporation PDP-11 in the summer of 1975 and for the past nine months MIR personnel in



the first floor scheduling area and Queeny Tower X-ray suite have processed information on 150,000 patient visits. Providing on-line or immediate access to patient records either by hospital number, Social Security number, or patient name, the system replaces manual search for previous films and typewriter-like preparation of requisitions. "Currently three months of past visits are maintained in a patient data file as well as current Barnes Hospital census information," said Mr. Hill. "Only that information pertaining to the present visit of a patient need to be entered at the computer terminal. An internal requisition is immediately printed, and a request to locate old films along with information telling where

COMPUTER STORY CAT SCANNERS DEPEND ON COMPUTERS

Nowhere else in radiology have computers had such a pronounced impact than in the use of CAT for diagnostic radiology. Without computers, CAT (Computed Axial Tomography) scanners wouldn't and couldn't exist. Internationally known for research in the field of computed tomography, Mallinckrodt Institute installed its' first EMI head scanner in 1974 and demonstrated for the first time, the EMI whole body scanner in October, 1975.

The computer also plays a similar, dominant role in the parallel PETT system developed at Mallinckrodt Institute and which utilizes emission data obtained from injected radio-pharmaceuticals as opposed to the x-ray transmission data of the EMI units.

CAT, as the name implies, is a technique by which cross sectional slices of an object can be mathematically reconstructed by using special x-ray scanners and computers. The scanning process involves taking many, many x-ray attenuation readings through an object at various positions and angles.

"The EMI whole-body scanner scans approximately 320 points for every 1/3 of a degree," states computer scientist Nizar Mullani, "for a total of over 100,000 data points per slice. As this data is being collected it is stored temporarily on the discs until the scan is complete. Once the scan is completed the computer rearranges the data and normalizes it so that it now represents linear scan profiles every 1/3 of a degree. This data is then convolved with a special filter function and back projected on a memory array where the image is reconstructed."

Over 500 million operations are required by the computer to produce one slice of an object. On the EMI whole body scanner this is achieved in about four minutes.

Mullani explains, "If these operations were to be done by hand by one person it would take over 16 years to produce one slice."

Thus, a concept that the use of the computer in radiology would allow the recovery of large amounts of information previously lost by the radiographic process which superimposed data on x-rays has been dramatically fulfilled. And Mallinckrodt Institute has assumed a major role in expanding the new frontier of computed tomography.

DR. RONALD EVENS NAMED PRESTON HICKEY MEMORIAL LECTURER

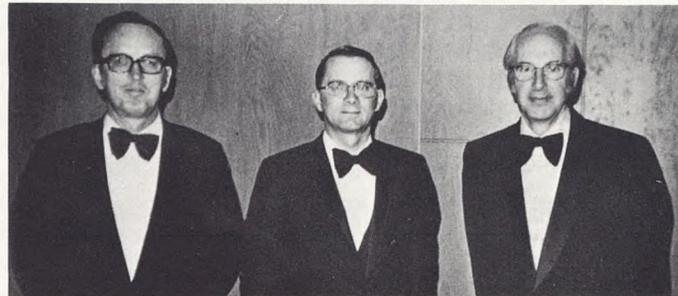
Dr. Ronald G. Evens, Director of Mallinckrodt Institute, was invited to deliver the Fortieth Annual Preston M. Hickey Memorial Lecture to the Michigan Radiological Society in Detroit on Thursday, March 4, 1976. This prestigious lecture series was established to honor the memory of a man who was a distinguished pioneer in the specialty of radiology, a leader in its development, and one of the best loved teachers in its history.

In his lecture, entitled "A New Frontier for Radiology - Computed Tomography", Dr. Evens presented an overview of computed tomography, discussing the basic principles and their application with currently available computed tomography equipment. He reviewed the impact of this method on neuroradiologic diagnosis, including economic considerations, nuclear medicine (comparing radionuclide studies and computed tomography) and other diagnostic procedures. The initial experiences of the Mallinckrodt Institute with whole body scanning were illustrated, and an evaluation given to date of the scanner's clinical utility.

The lecture will be published in the June 1976 issue of the American Journal of Roentgenology.

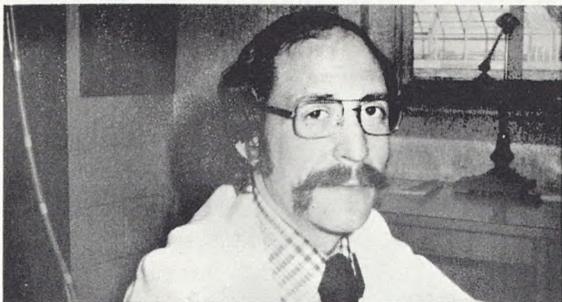


Dr. Ronald G. Evens speaking at the Preston M. Hickey Memorial Lecture in Detroit, Michigan on March 1976.



Left to right, Dr. Leo S. Figiel, President, Michigan Radiological Society; Dr. Ronald G. Evens, Hickey Memorial Lecturer; Dr. William Eyler, Editor, Radiology.

VISITING FELLOWSHIP PROGRAM RECEIVES NATIONWIDE ATTENTION



Dr. Louis A. Gilula

Since its inception in 1974, a large number of practicing radiologists from around the country have enrolled in Mallinckrodt Institute's Postgraduate Visiting Fellowship Program. The course offerings include diagnostic techniques, arthrography, nuclear medicine, radiation oncology, cranial computed tomography, and abdominal ultrasound.

Dr. Louis A. Gilula is Director of the Program which, he states, "is designed to afford practicing radiologists an opportunity to gain information about new techniques or improvements in old techniques by personally interacting with our staff radiologists." Concentrating on individualized instruction the programs feature a personal one hour conference each day with a full-time attending staff member, teaching files in all areas, eight hours per day ACR Category I credit and may be arranged in length from one to five days.

"There has been nationwide interest in the post-graduate courses," Dr. Gilula said, "and we have received a vigorous response to the cranial computerized tomography course which is filled through June, 1976."

After completing two days of study in arthrographic techniques, Dr. James Curry of Louisville, Kentucky described his instruction as "a very satisfactory experience and worthwhile project which should be of service to a great many people."

Dr. Clinton Anderson, a practicing radiologist in Minneapolis, Minnesota participated in the cranial computed tomography and nuclear medicine courses during a five-day period in order to closely observe and compare tomography and radionuclide scans.

"I wanted more didactic training in the field of nuclear medicine," said Dr. Thomas Hansen of Janesville, Wisconsin who found the five day course in nuclear medicine "most informative and a worthwhile improvement of my knowledge in the field." Dr. Hansen is associated with a 275 bed hospital which has a nuclear medicine department performing approximately ten scans daily.

HONORED

William H. McAlister, M.D., and Carlos A. Perez, M.D. were appointed new Fellows in the American College of Radiology at the 53rd annual meeting in Washington, D.C., March 28 - April 1, 1976. An honorary fellowship was also awarded Michel M. Ter-Pogossian, Ph.D.



William H. McAlister, M.D.



Carlos A. Perez, M.D.



Michel Ter-Pogossian, Ph.D.

Welcome Back, Dr. Siegel!

Dr. Barry A. Siegel, Associate Professor of Radiology, returned to Mallinckrodt Institute on March 1, 1976 to resume his position as Director of the Division of Nuclear Medicine. Dr. Siegel was on leave-of-absence from the University to serve a tour of duty with the United States Air Force in the Radiological Science Division, Department of Radiation Biology, Armed Forces Radiobiology Research Institute, Bethesda, Maryland. During this period, Dr. Siegel was an Assistant Professor of Radiology (part-time) at Johns Hopkins University School of Medicine and participated in their radiology and nuclear medicine teaching program.

Dr. Siegel serves as a member of the Radioactive Pharmaceuticals Advisory Committee of the Food and Drug Administration and of the Advisory Panel on Radiopharmaceuticals of the United States Pharmacopeia. He is Chairman of the American College of Radiology Committee on Self-Evaluation in Nuclear Radiology and serves as a member of the Commission on Nuclear Medicine for the ACR. Dr. Siegel has recently been appointed as a member of the Consulting Editorial Board of the Journal of Nuclear Medicine.

TECHNOLOGY STUDENTS

MIR technology students, Corliss Fischer, Stanley Nieman, and Ralph Gullett presented the program, "Emergency Neuroradiologic Exams" at the February meeting of the Fourth District X-Ray Society.

"SPARKLING NEW FACILITIES COMBINE WITH TRIED AND TRUE OLD ONES"



The Cancer Biology Section, joining other sections within the Division of Radiation Oncology, has moved parts of its research and administrative activities to the 4511 Forest Park Medical Building. The move will almost double space facilities, and provide a much greater capability to carry out research projects.

A major section of the new quarters will be occupied by two laboratories. One of these will house work on the body's immune systems of cancer patients before, during, and after radiation therapy to see whether that strength can be used to predict the future course of their diseases, whether radiation affects that strength, and whether certain patients can be identified who could be helped by drugs which stimulate the immune response. This project will be made easier because of its proximity to the new follow-up clinic which will be operated by the Clinical Oncology Section on the third floor.

In the other laboratory will be testing of tissue samples taken from human breast cancer, endometrial cancer, and prostate cancer to see whether they contain elements which might make them sensitive to the hormones estrogen and progesterone. This information is of great value in the design of hormone-therapy treatment for these types of cancer.

On the ground floor of the building, in what is now parking space, will be built a mouse-breeding area and some associated labs. This facility will provide the Section with nearly all of the 100,000 mice required

for experimentation each year. In the adjacent labs, various combinations of anticancer drugs will be tested on cancerous mice to see which combinations might be effective against human tumors. Other experiments to be carried out at Forest Park include work on the immune systems of normal and tumor-bearing mice and study of a specific kind of leukemia in mice and its response to various drugs.

Continuing good use will be made of the labs and offices on the tenth floor of MIR. Among the ongoing projects, there will be a study of the cells which produce various blood components and the mechanisms by which their functions are controlled and of the effects of various anticancer agents on these crucial normal cells. Another project investigates the cells called macrophages, which are important parts of the body's defense against disease. A third experiment will explore the ways drugs react with cells in an effort to discover where in the cell cycle various drugs exert their lethal effects. Some of this information will be used to develop computerized systems for modeling the growth of tumors and their response to therapy. A final study will focus on the effect of various drugs and radiation of melanoma, which has proved resistant to most forms of therapy in the past.

Thus, the move of part of Cancer Biology facilities and personnel from MIR to Forest Park does not signal an end, but rather a beginning of a new, broader, and richer phase of association.

GODFREY HOUNSFIELD, EMI SCANNER INVENTOR, TO DELIVER FIFTH WENDELL G. SCOTT LECTURE

In the fall of 1976, Godfrey Newbold Hounsfield, British inventor of the revolutionary EMI Brain and Body Scanner computerized tomography system will deliver the fifth annual Wendell G. Scott Lecture at Mallinckrodt Institute of Radiology, Washington University Medical Center. Mallinckrodt was one of three institutes to receive the first body scanners produced by British developers, EMI Limited.

The distinguished computer scientist was the 1975 winner of America's top scientific honor, the Lasker Award, which describes the Scanner as one of the most important contributions to medical science since the discovery of the X-ray in 1895. Since the Lasker Foundation Awards were established in 1944, twenty-five of the award winners have later won the Nobel Prize.

The MacRobert Award, presented to Hounsfield by the Duke of Edinburgh in 1972, is one of a number of major awards he has received for his invention. This Award is described as the Nobel Prize for engineering. In March, 1975 he was made a Fellow of the Royal Society, Britain's highest scientific honor.

In his early fifties, Godfrey Hounsfield grew up on his father's farm in Nottinghamshire, the youngest of five children. His father began his career in the steel industry and a near relative, Leslie Hounsfield, was the inventor of the Trojan motor car in the 1920's and of the Hounsfield Tenseometer for measuring strengths of materials.

During his grammar school days, Godfrey Hounsfield became interested in electronics and began building recording apparatus in his own workshop.

After World War II he was awarded a Certificate of Merit from the Radar School at the Royal Air Force College, Cranwell, and remained there for a period as a lecturer.

He studied electrical and mechanical engineering at Faraday House Electrical Engineering College, London, where he obtained a Faraday House diploma.

Mr. Hounsfield then joined EMI Limited, working initially on radar systems and later on computers. As project engineer, he headed the design team for the first large, solid-state computer to be built in Great Britain - the EMIDEC 1100.

Since 1968, he has been concerned with research on new x-ray techniques, the development of the EMI Scanner computerized transverse axial tomography system, and other applications for this technique.

From an early age Godfrey Hounsfield, who is a bachelor, has been a long distance walker. He also plays the piano and attends classical concerts.

The Wendell G. Scott Memorial Lecture was established by friends and colleagues of the late Dr. Scott as a living memorial to his loyalty and excellence and many important positions of leadership to Washington University, radiology, and medicine. Previous lecturers have been prestigious leaders from the many fields which relate to medicine and radiology. In recognition of his position of leadership in physics and computer science, Mr. Godfrey N. Hounsfield was named the fifth annual Wendell G. Scott Lecturer.



Dr. Rao Visits India

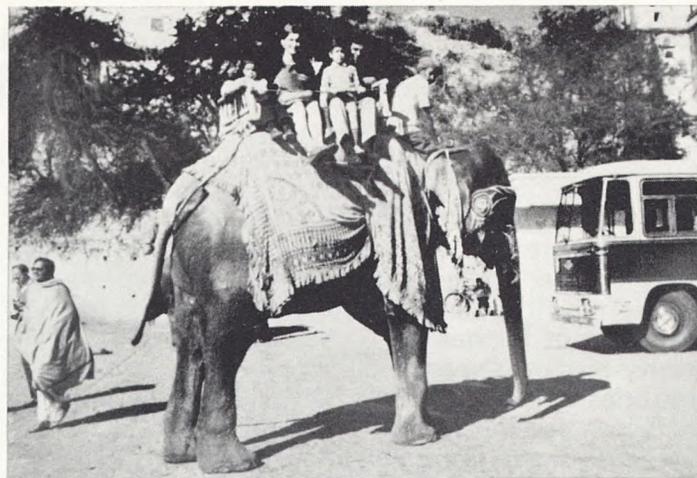
Last December there was much excitement and activity in the Rao household as the family happily prepared for a return visit (after nine years) of Dr. Ramanath Rao, and a first one for his wife, Francisca, and their two sons to his homeland of India. The vacation involved not one family passport but four! One for Dr. Rao, a citizen of India and a permanent U.S. resident; one for Mrs. Rao, who is Dutch; and one for each of their American born sons, Janardhan, 6, and Vijay, 3.

The reactions of the group (1 native and 3 foreigners) was the same to India - they loved it! In fact Mrs. Rao and children remained there several months after Dr. Rao returned to the U.S.!! Mrs. Rao marveled about the hospitality extended to them: "Everyone is very, very warm and friendly . . . we encountered no trouble in extending our visas, changing money, or finding excellent lodging accommodations."

India is the seventh largest country in the world. Mrs. Indira Gandhi, the Prime Minister, rules 638,000,000 people. In her 50's, the daughter of Nehru, the first Prime Minister of India, Indira Gandhi has all the required background in the political world. "Backed by two-thirds of the members of Parliament, she has been ruling for six to eight years," said Dr. Rao, "and has made changes in all aspects of Indian life such as decreased government corruption and increased food production. Smallpox has been eradicated through vaccination programs in the last two years."

India has great varieties and differences in both its land and people; in fact a vacation in India has been termed "the most astonishing show on the face of the earth." The land includes a desert, thick jungles, and one of the world's rainiest areas where during July, August, and September the monsoon rains fall every day. India also has broad plains, mighty rivers, tropical lowlands, and the tallest mountain system in the world (Mt. Everest in the Himalayan ranges).

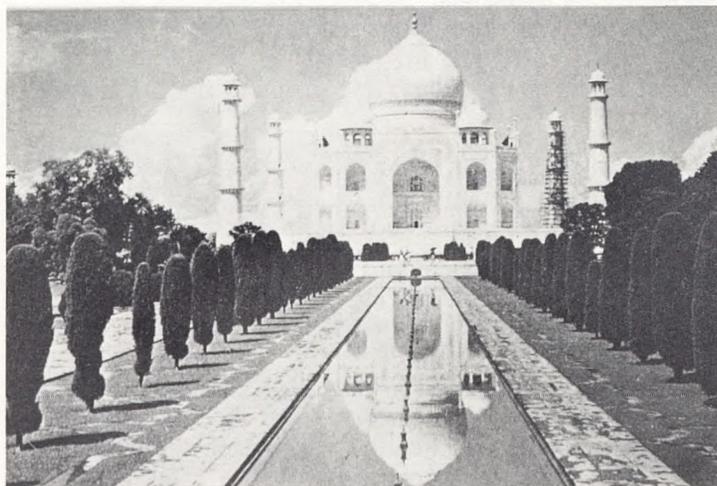
Representing many different races and religions, the people of India with its 16 major languages speak about 180 tongues. "One can get by, speaking English, anywhere in the country," said Dr. Rao. Some Indians are wealthy, others have only the bare necessities of life and are trying hard to better their conditions.



Elephant Ride



8th Century Shore Temple



Taj Mahal, Agra India

DR. RAO VISITS INDIA

A vast number of the people are vegetarians. In answer to our question about the "sacred cow" in India, Dr. Rao explained, "The cow is considered to be a holy animal in India, like any other of God's creations. Vegetarians do not believe in killing or slaughtering animals for their existence and the cow has become a symbol of this belief," To own an elephant is a mark of wealth for, in the words of the Indian proverb, "An elephant dead or alive is worth 1000 gold pieces."

"How I enjoyed seeing the different places," said Dr. Rao. "Fantastic rugs, jewels, silk, carvings in New Delhi, dining on excellent curry dishes in Bangalore, enjoying beautiful beaches in Madras on the east coast and Mangalore on the west coast, and viewing an 8th century temple from the Bay of Bengal."

Art and sculpture, all religious, can be seen in every town. The most beautiful monument of love, the Taj Mahal, is located in Agra, 250 miles south of Delhi in northern India. This tomb was built by Shahjahan, the Moghul Emperor of India in the 17th century, as a tribute to his wife. Designed by famous architects from Iran, France and Italy, the tomb took 20,000 people 20 years to build.

"It's a land of contrasts," said Dr. Rao, "where one sees palm trees, golf courses, snake charmers, mosques, synagogues, tombs, rickshaws, modern air-conditioned hotels, temples, cathedrals, flowers, ornate architecture, and inlaid colored marble."

In conclusion, Dr. Rao remarked, "In a country having such contrasting diversity, the famous Indian philosopher and Nobel Laureate, Rabindranath Tagore, typifies the spirit of India in his prayer,"

Where the mind is without fear and the head is held high;

Where knowledge is free;

Where the world has not been broken up into fragments by narrow domestic walls;

Where words come out from the depth of truth;

Where tireless striving stretches its arms towards perfection;

Where the clear stream of reason has not lost its way into the dreary desert sand of dead habit;

Where the mind is led forward by thee into ever-widening thought and action —

Into that heaven of freedom, my Father, let my country awake.

— Gitanjali

RECEIVES AWARD

The Society of Nuclear Medicine has announced that Dr. Michel Ter-Pogossian, physicist and nuclear scientist, is the recipient of the Paul C. Aegersold Award for 1976. This award for outstanding achievement in basic science applied to nuclear medicine commemorates the contributions of Dr. Paul Clarence Aegersold to the applications of nuclear physics to nuclear medicine and radiation biology.

Dr. Aegersold contributed greatly to the emergence of nuclear medicine as a discipline by his energetic leadership in the provision of cyclotron-generated and reactor-produced radionuclides and his support contributed importantly to the formation and success of the Society of Nuclear Medicine.

NATIONAL CT CONFERENCE

A National Conference on Computerized Tomography in Radiology was sponsored by the American College of Radiology in St. Louis at the Sheraton-West Port Inn on April 25 - 28, 1976. The objectives of the conference were to analyze the impact of computerized tomographic imaging with x-rays, gamma rays, and ultrasound on the radiologic delivery of health care. The purpose of the meeting was to identify areas of education and further development and implementation of CT. Particular emphasis was placed upon the interaction of CT procedures with other radiologic examinations in the attempt to identify the variable cost effectiveness of this new technology.

Dr. Michel Ter-Pogossian was Co-Chairman for the National Conference. Participants in the conference from the Mallinckrodt Institute of Radiology included Mr. Armand Diaz, Dr. Ronald G. Evens, Dr. Mokhtar H. Gado, Dr. Robert Stanley, and Dr. Michel Ter-Pogossian. Both Drs. Evens and Ter-Pogossian also served as chairmen for several of the sessions and panel discussions at this meeting.

ROLL THOSE CAMERAS!



Audio-Visual Crew, Helen Pares, Gergory Merrick (standing), and Steve Jones "on location" of training film to instruct Radiation Oncology technologists in use of interactive computer scheduling system.

THE DIRECTOR'S OFFICE REPORTS:

PROMOTIONS

Ms. Maria Straatmann to the rank of Research Associate, effective July 1, 1976.

Ms. Sylvia Harwig to the rank of Research Associate in Nuclear Medicine in Radiology, effective April 1, 1976.

Dr. John Harwig to the rank of Research Assistant Professor of Nuclear Medicine in Radiology, effective January 1, 1976.

Mr. Rexford L. Hill to the rank of Assistant Professor of Computer Applications in Radiology, effective July 1, 1976.

Dr. R. Gilbert Jost to the rank of Assistant Professor of Radiology and James Picker Fellow in Academic Radiology, effective July 1, 1976.

Dr. Fransiska Lee Brigham to the rank of Assistant Professor of Radiology, effective July 1, 1976.

Dr. James A. Purdy to the rank of Assistant Professor of Radiation Physics in Radiology, effective July 1, 1976.

Dr. Donald P. Ragan to the rank of Assistant Professor of Radiation Oncology in Radiology (Operations Research), effective July 1, 1976.

Dr. Federico Reiter to the rank of Assistant Professor of Radiology, effective July 1, 1976.

Dr. G. Leland Melson to the rank of Associate Professor of Radiology, effective July 1, 1976.

Dr. Barry A. Siegel to the rank of Associate Professor of Radiology, effective July 1, 1976.

Ms. Carol Higgins to the rank of Research Associate, effective July 1, 1976.

NEW STAFF

Dr. Beauvoir H. Edmond joined the staff of the Mallinckrodt Institute as Instructor in Clinical Radiology, effective January 1, 1976. Dr. Edmond is Director of the X-Ray Department at Homer G. Phillips Hospital.

Dr. Lawrence M. Kotner, Jr. was appointed Instructor in Clinical Radiology to the Institute's staff, effective January 1, 1976. Dr. Kotner is on the full-time staff at Jewish Hospital of St. Louis.

Dr. Ali Razek was appointed Assistant Professor of Radiology to the full-time staff of the Division of Radiation Oncology at the Mallinckrodt Institute, effective May 1, 1976.

Dr. Eduard V. Kotlyarov joined the staff as a Research Assistant in Nuclear Medicine on February 1, 1976.

Dr. Bernardus van der Zeijst joined the Institute's staff as a Research Associate in Cancer Biology on March 1, 1976.

Dr. Aly A. Razek and Dr. Fred Zivnuska have been awarded first and third year Junior Faculty Clinical Fellowships from the American Cancer Society for the period July 1, 1976 - June 30, 1977. Dr. Zivnuska is currently in his second year of this fellowship.

Dr. Gary D. Shackelford, Assistant Professor of Radiology, was also appointed Assistant Professor of Radiology in Pediatrics, effective February 1, 1976.

OFF STAFF

Dr. R. Edward Coleman will accept the position as Director of Nuclear Medicine at the University of Utah and will begin his new responsibilities at that University on May 1, 1976. Dr. Coleman was Acting Director of the Division of Nuclear Medicine at the Mallinckrodt Institute for the period July 1974 - March 1976.

Dr. Tony M. Deeths will join the St. Louis Ballas Radiology Group in private practice in May 1976.

Dr. Gerardus Freriks returned to the Netherlands to assume a position at the Radiobiological Institute TNO beginning in June 1976.

Dr. Morris Reed Knight entered the private practice of radiology at the North Florida Regional Medical Center in Gainesville, Florida on January 1, 1976.

Dr. George D. Oliver accepted an academic appointment as Associate Professor of Radiology at the Milton S. Hershey Medical Center, Pennsylvania State University in Hershey, Pennsylvania, effective February 1, 1976.

Dr. Marcus Raichle and Friends March 15, 1976:



"Good Morning, Dr. Raichle"

No, it wasn't Mr. Phelps of Mission Impossible who passed us on Hwy 40 this morning, it was Dr. M. E. Raichle of Mallinckrodt's Radiation Sciences comfortably ensconced in a chauffeur-driven Silver Cloud Rolls Royce. We knew Dr. Raichle was a classic car buff — he drives a 1960 Mercedes Benz roadster — but really - - -

As the "Cloud" whizzed by our trusty Mustang, we heard strains of a taped "Happy Birthday" gleefully shrilled by some familiar voices of Radiation Sciences — and this was our clue!! A surprise birthday present for Dr. Raichle! Terrific!

The whole thing began as he was savoring his second cup of coffee at breakfast and Mrs. Raichle announced: "Your car is here, dear." (She was in on the surprise) and from then on, the day was a delight, complete with all the excitement of Mission Impossible! Cruising luxuriously along Manchester Road, about two blocks from his residence, Dr. Raichle, ala chauffeur, was suddenly approached by a police vehicle and summoned to "pull over". It seems the police responded to a call by the good doctor's Warson Woods neighbors who reported a very "suspicious car cruising the neighborhood" (they weren't in on the surprise)!

The rest of the trip was uneventful and luxuriously pleasant, all culminating in a gala reception committee of friendly faces at Queeny Tower entrance (red carpet and all) and, of course, Focal Spot's mobile news camera.

Later on in the day, Dr. Raichle commented, "Pretty spectacular — be hard for anyone to top this . . . Absolutely tremendous . . . When I reflect on this occasion in future years I will still be impressed by their thoughtfulness."

And you know Dr. Raichle's right: he is "still smiling" about his birthday present! (After all, doesn't every Cloud have a Silver lining?)



"HAPPY BIRTHDAY TO YOU"

CLIMB EVERY MOUNTAIN, HIT EVERY WALL

- WHAT: MIR CHIEF RESIDENTS' RACQUETBALL PARTY
WHERE: THE COURTHOUSE RACQUETBALL CLUB IN CREVE COEUR
WHEN: SATURDAY, FEBRUARY 14, 1976
HOW: AVERAGE VISION AND A RUDIMENTARY CEREBELLUM
WHY: WHY NOT?
COMMENTS: Raquetball is fast becoming one of the most popular indoor sports in America. Similar to handball and more strenuous than tennis, it is played in a five-sided room (four walls and ceiling playing area). A smaller than tennis stringed racquet of aluminum, wood, or fibre glass is used with a black, hollow ball similar to a tennis ball, without the fuzz. The ball must be hit after one bounce and can bounce off a side wall before hitting the front wall. A point may be won only when serving the ball and a winning score consists of 21 points.



Photos by Dr. Gene L. Davis, Jr.



MUR

Christmas Photos by Tom Murry

"The Things We Did"

Help Keep FOCAL SPOT Informed of Your Activities

Dear Alumni:

To help us keep your former house officers or faculty and friends apprised of your achievements, we would appreciate your taking a few minutes to fill out the following questionnaire.

Name

Class

Address

Recent activities (publications, promotions, etc.)

Honors, fellowships, medals, honorary degrees

Major field of research or study

Special interests

Please fold, staple and mail.

We also appreciate receiving photographs and press clippings

Return address:

fold

Place 10¢
Stamp
Here

Ronald G. Evens, M.D.
Director
Mallinckrodt Institute of Radiology
510 S. Kingshighway
St. Louis, Missouri 63110

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WHAT'S UP, DOC?

Dr. Ronald G. Evens was a guest on the KMOX Radio "At Your Service" program on January 7, 1976 to discuss the new whole body EMI Scanner that was recently installed at the Mallinckrodt Institute of Radiology.

Dr. Robert Stanley served as a member of the faculty for a course in Gastrointestinal Radiology directed by Drs. Ruben Koehler and Dave Davis in Las Vegas, March 31 to April 4, 1976.

Ann Stanley, daughter of Dr. Robert J. Stanley with three team mates from the Sugar Creek Swim Club, established two new Ozark AAU Relay records in the 400 medley and 400 freestyle relay events. These new records were set at the Ozark AAU Senior Championships held March 5-7, 1976.

Dr. William A. Murphy delivered the following papers on April 2, 1976 for the Washington University Medical School Continuing Education Course in Rheumatology: "Radiologic Imaging of the Spine and Sacroiliac Joints" and "Radiographic Diagnosis of Rheumatoid Arthritis".

On May 27, 1976, Dr. Murphy will present a paper entitled "The Role of Mammography" for the continuing education course, "Advances in the Diagnosis and Treatment of Surgical Diseases."

The exhibit, "Venous Angiography of Hemodialysis Fistulas - Experience with 72 Studies", Louis A. Gilula, M.D., Tom W. Staple, M.D., and Charles B. Anderson, M.D. was presented by Dr. Gilula at the American Society for Artificial Internal Organs in San Francisco, March 31-April 3.

Dr. G. Leland Melson attended the First Annual Course on Diagnostic and Therapeutic Angiography sponsored by the Society of Cardiovascular Radiology held at the El Conquistador Hotel and Club, Puerto Rico, February 17-20, 1976. In addition to attending a superb course, in a beautiful setting, Dr. Melson enjoyed visiting MIR alumnus Dr. Edda de Sevilla and her husband, Angel, who graciously hosted a delightful tour of Old San Juan, the Rain Forest and other interesting high lights of Puerto Rico.

CONGRATULATIONS! Dr. Dan Biello has been appointed Chief Resident for 1975-76 and Dr. Marilyn Siegel Co-Chief Resident. They will work closely with Drs. Ronald Evens and Lee Melson in the continued development of MIR's residency program.

Dr. Glasgow presented the following paper: "Radiation Exposure of Airport Workers at the St. Louis International Airport", at the Joint Meeting of the Mid-American Chapter of the Health Physics Society and the Missouri River Valley Chapter of the American Association of Physicists in Medicine, held at the Menorah Medical Center, Kansas City, Missouri, February 28, 1976.

Dr. Emily Smith will attend a GI-GU course at Harvard University, May 10-13, 1976.

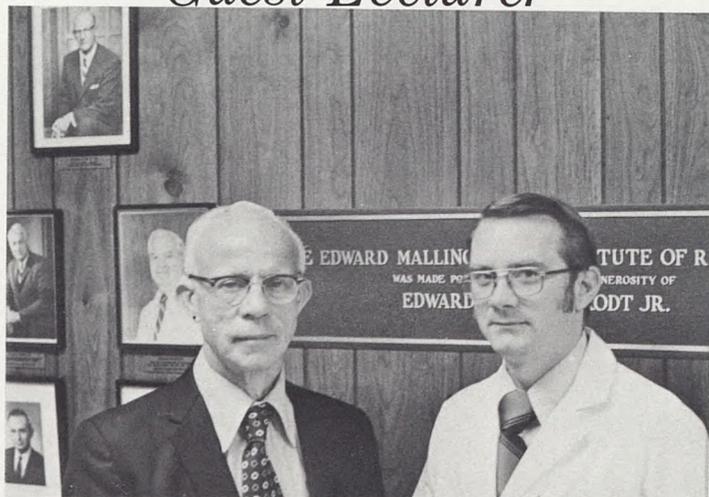
Dr. Michel M. Ter-Pogossian was invited to deliver the Benedict Cassen Lecture on April 21, 1976 in Los Angeles, California. His lecture was entitled "Impact of Computed Tomography on Nuclear Medicine."

Dr. Michel M. Ter-Pogossian will present the address, "Perspectives in Computed Tomography" at the June, 1976 meeting of the Society of Nuclear Medicine in Dallas, Texas.

Drs. Robert Stanley and Mokhtar Gado were invited speakers at the International Symposium on Computed Tomography sponsored by Dr. Juan M. Taveras in San Juan, Puerto Rico on April 5-10, 1976.

Drs. Mokhtar Gado and Isidro Huette will present papers at the American Society of Neuroradiology, May 18-22, 1976, in Atlanta, Georgia.

Guest Lecturer



Dr. Robert N. Cooley, guest lecturer for the February, 1976 City-Wide Radiology Conference is pictured with **Dr. Ronald Evens** prior to the meeting in Scarpellino Auditorium. Dr. Cooley is Professor and Chairman of the Department of Radiology at the University of Texas, Galveston, and a prominent member of the American Board of Radiology.

Alumni In Arizona

On March 3, 1976, when fifteen radiologists and their spouses arrived at The Arizona Biltmore in Phoenix and were greeted by a doorman wearing a cowboy hat, the second annual MIR Alumni Meeting had officially begun.

In the unique Spanish-Indian architectural setting of the hotel and against a backdrop of towering mountains and expansive desert, the group heard a presentation by Dr. Gil Jost on "The Uses of Computers in Radiology;" Dr. Stuart Sagel gave an up-to-date report on "Computed Tomography of the Body" and Dr. Ben Mayes talked about his experiences with CAT scanning in a private hospital in his lecture, "Computed Tomography of the Head."

The weather was cool, but sunny. The hotel's 1200 acres, manicured to perfection, provided excellent tennis and golf facilities. Tennis was, by far, the number one recreation of the group, but as a result of the meeting, we may have "several experts" on lawn bowling" at MIR. In fact, it is reported that

there was discussion as to whether the group should set up a satellite Mallinckrodt program in Phoenix.

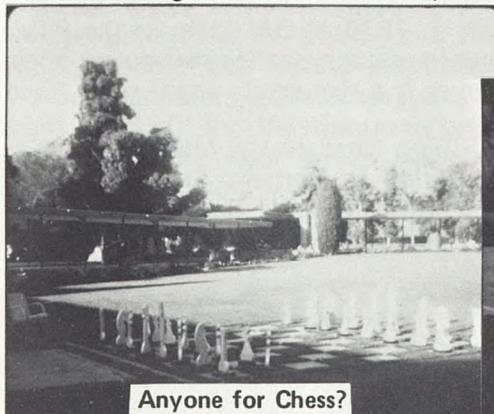
Some of the wives visited the surrounding areas to see what cosmopolitan Phoenix and Scottsdale had to offer. One of the participants termed the food "the best I've ever had at a hotel."

Dr. John Forrest's wise planning of the four day meeting reflected a happy mixture of work and recreation and as a result, the comments were most favorable on "the high quality of presentations" and the fellowship and opportunity provided for people to reminisce about previous times at Mallinckrodt and discuss present changes and expansion of the Institute.

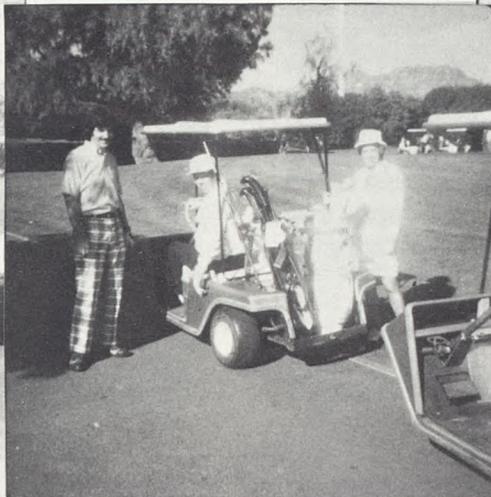
The group included a large contingent from Missouri but was enlivened by participants who arrived from Fresno and San Diego, California, and Springfield, Illinois.

Plans for next year's meeting are in preparation, and we know that it will be another enjoyable reunion.

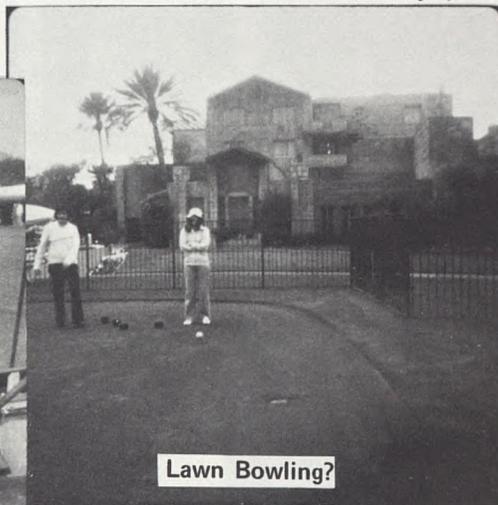
The Arizona Biltmore



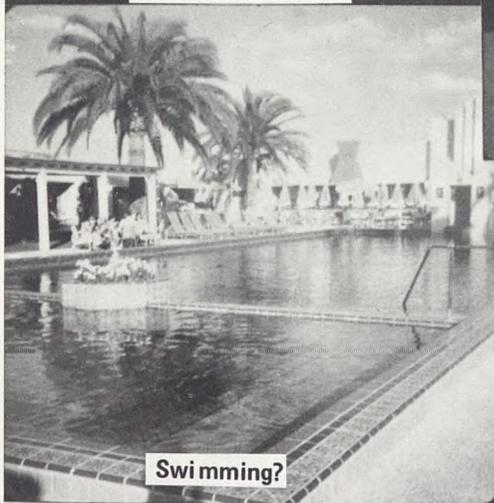
Anyone for Chess?



Dr. John Forrest visits with Dr. and Mrs. David Perkins



Lawn Bowling?



Swimming?

Dr. Ben Mayes, Official Photographer



Left to right: Dr. and Mrs. John Forrest, Dr. and Mrs. Ben Mayes, Dr. and Mrs. Gilbert Jost, Dr. and Mrs. Stuart Sagel

Weddings



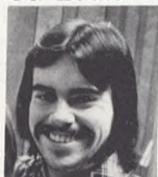
Sue Schmidt, 2nd x-ray receptionist, will be married May 15th to Tom Roth, St. Louis Police Detective. The wedding, to be held in the picturesque setting of the Forest Park Jewel Box, will be followed by a breakfast at Cheshire Inn, and an evening wedding reception. The couple will visit Florida on their wedding trip.

Montie Higgins, 5th x-ray receptionist, will be married August 6, 1976 to Allen Garner.



Jere Palazzolo, R.T., 2nd floor technologist, will be married to Patricia Nehring, student technologist, on May 28, 1976. The couple will visit Florida and the Bahamas on their wedding trip.

Sally Brendle, R.T. will be married on June 12, 1976 to Nick Palazzolo at Holy Family Catholic Church in St. Louis.



Congratulations to **Kerry Shipley**, R.T., Queeny Tower, and **Carla Vogel**, Technologist Aid, 3rd floor EMI Room, who were married on February 21, 1976 at Beautiful Savior Church in Bridgeton, Missouri.

Love Is.....

February 16, 1976 and the 39th wedding anniversary of Roy Ragan and his wife, Margaret.

"My dear wife Margaret - With your over abundance of love and care, you have made the past 39 years of my life the happiest I have ever known. On this, our 39th wedding anniversary, I am proud to publicly express my gratitude."

Signed
Roy M. Ragan



Barbara Roberson, 2nd x-ray receptionist, will be married May 1st, 1976 to Kevin McConnell.

Linda Hogue, 2nd x-ray receptionist, will be married June 25, 1976, to Brian Youtzy.



The wedding of **Jim Niemann**, Computer Programmer in Radiation Oncology, and Denise Beineke took place March 6, 1976 at Our Lady of the Pillar Church. The couple visited San Francisco on their wedding trip. Denise is a real estate agent with Alice Blake Realtors.

Jim Hanson, Billing Clerk in the MIR Accounting office, will be married to Barbara Ann Molaski on May 21, 1976 at Our Lady of Loretto Church in Spanish Lake, Missouri.

New Arrivals



Sarah Ruth Reeves

Sarah Ruth Reeves was born to Dr. and Mrs. Glen Reeves on March 3rd at 10:45 A.M. Her birth weight was 3.62 kilograms (8 pounds) and her length was 53 cm (20 $\frac{3}{4}$ ""). She has a brother, Michael, age 27 months.

Mr. and Mrs. Adam Vorlage announce the birth of their daughter, Christina Vorlage on March 9, 1976. Christina weighed 8 lbs., 3 oz.

Dr. and Mrs. Tony M. Deeths are the proud parents of a new little son. David Matthew Deeths was born on January 18, 1976 and weighed 7 lbs., 9 oz. He has two sisters, Chrissy, 4, and Katie, 2.

We Could Have Danced All Night

If folk dancing is an activity you've always wanted to "give a whirl", you should put on your dancing shoes and join Linda Knight and Mark Selikson, graduate students in the Division of Radiation Sciences and folk dancers for over three years. Three nights a week they're learning and rehearsing dances of the world including Yugoslavia, Rumania, Hungary, Greece, Israel, Turkey, Russia, Germany, Switzerland, South Africa, U.S.A., and others.

They are members of the International Folk Dance Association of University City and of a performing group affiliated with Washington University.

Dances range from easy to difficult, slow to energetic (it's great exercise!). Most dances are done in lines or circles, but some are "partner dances".

"We have guest teachers who come to St. Louis and teach the dances and ethnic style," said Linda.

Mark added, "We encourage all interested people to come to our sessions which are open to everyone. All ages participate, 14 to 80 years. Dances are taught during the first hour for the benefit of beginners."

Authentic-looking costumes are worn for performances, though for the Saturday and Sunday night sessions, people wear casual clothes. Many like to wear Yugoslav shoes (opanki) for dancing.



He Writes The Songs



You may know Gay Miller only in his role of a radiographic dark room technician — little realizing as you see him going about his work on third floor MIR that in off-duty hours, Gay is either performing or rehearsing with his very own rock band, the "Circus". He's the man behind the group and the leader in charge — capable of composing - playing percussion - or doing the back-up or lead singing. Gay attributes his musical career to his mother, also a pianist, who, realizing 12 year old Gay's talent and love for music, persuaded a neighbor to give him piano lessons. From that time on, it was music, all the way, with Gay.

At fifteen, he was playing drums in a jazz band on the west coast, and when the Miller family moved to St. Louis, Gay was soon singing and dancing again as he became involved in the varied musical productions and activities at Horton Watkins High School in Ladue.

Gay has played drums and sung with soul, rock, and jazz groups. He's serious about his music and composing and rehearses every night.

Some engagements have been good — some not so good. On one occasion Gay and band were returning to St. Louis from a Saturday night engagement in Chicago when they ran out of gas. Stranded, a farmer came to their rescue and provided overnight accommodations. To show their gratitude, the fellows offered to pitch hay - which they did - but the farmer had one more fervent request: to give his little town a "country western music hour". Well, Gay and his friends complied — but as Gay said, "We did it, but with congos and tamballes, we really had to improvise!!"

Focus on New Faces

Carole Thornton says she has lost ten pounds since coming to work at Mallinckrodt as a clerk-typist in Nuclear Medicine. "All the errands I run have contributed to my weight loss and by my first anniversary date, I hope to be another 'Little Egypt'". And why not — one of Carole's many hobbies is belly dancing!

The daughter of deaf mute parents, Carole has constructively channeled her background and experience to work as a court interpreter for deaf mutes.

A wife and mother of three children, ages 15, 14, and 11, Carole and her husband, Bob, enjoy their family outings of camping, hiking, fishing, and hunting. Bob is a talented musician who plays several instruments and writes songs. Carole sews her own clothes, collects old phonograph records, and still finds time for Yoga, Transcendental Meditation and German cooking!

Michael Kurtz, new Research Technician in Cancer Biology, has acquired a most interesting beer can collection. Along with several European varieties, his prize item is an Old Frothingslosh. Michael, who is a bachelor, graduated from UMSL with a B.A. degree in Biology.

Kathy Bierman, Billing and Collection Clerk in Radiation Oncology, is a wife and mother of two: Laura Ann, 12, and Mark, 10. A graduate of Notre Dame High School, Kathy tries to adjust her schedule to include time for her hobbies of gardening and painting. "All in the family" enjoy traveling around the country.

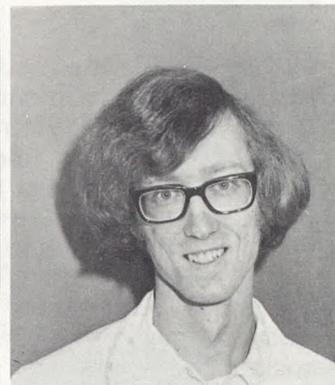
Christy Jakovich, Secretary to Dr. Carlos Perez, comes to Mallinckrodt from the Washington University School of Dental Medicine where she was department secretary in Pedodontics for three years. She's an "outdoor girl" who especially enjoys camping, canoeing, tennis, and bicycling and indoors on a rainy day, pottery and plants.

Sandra Mitchell, R.N., new Assistant Nursing Supervisor in Radiation Oncology, received her A.D. in Nursing from Forest Park Community College. Tall and attractive, Sandra's hobbies are interior decorating, tennis, and photography.

Carol Keller, Secretary to Dr. Carlos Perez, may be a novice at tennis (she's learning to play) but she's a pro at cooking, knitting, needlepoint, decoupage, macrame and all kinds of arts and crafts. We'll have an opportunity to enjoy her talent when she displays some of her beautiful handiwork in the MIR Exhibit area this spring.



Carole Thornton, Clerk-typist



Michael Kurtz



**Kathy Bierman, Billing and
Collection Clerk**



Christy Jakovich, Secretary



Sandra Mitchell, R.N.



Carol Keller, Secretary

"I'm an ardent feminist", says **Leesa Gornish**, new Programmer in the MIR's Diagnostic Computer Section and wife of MIR resident, Dr. Michael Gornish. Born in Memphis, Tennessee, she received her A.B. degree from Radcliffe College in 1972. Leesa is a busy wife, mother of a seven months old son, Shlomo Zev, and programmer but still finds time for her hobbies of music, sewing, and puzzles.

LET THERE BE MUSIC

Talent for and love of music is reflected in **Marcella Hooks'** family and home. Her singing ability was apparent at a very young age. She nurtured this talent through vocal lessons and training received as a member of the outstanding Sumner High School Choir. Marcella has recently joined MIR's Radiation Oncology Division as a Billing Clerk but continues her singing as a jazz and popular music vocalist in St. Louis night clubs and out of state. Aaron Hooks, Marcella's husband, enjoys his own hobbies of photography and tennis but enthusiastically supports and encourages Marcella's musical interests as well as their four children's.

Paula Ryan is a new Secretary in the Physics Section of Radiation Oncology. She and her husband, William, and 5 year old daughter, Jennifer, live in Florissant, Missouri where he is Vice President of Boatmen's National Bank of North St. Louis County. The Ryans especially enjoy the St. Louis seasons — football and baseball, that is — although they are not just spectator sports enthusiasts. Golf and tennis are also favorite hobbies.

Fred M. Domke, Systems Analyst in the Diagnostic Computer Section, began his career in computer systems with an actuarial consulting firm providing information on computer systems for insurance companies.

For 1½ years, as a member of the Radiation Oncology computer staff, Fred helped to develop their clinical information system. He has also been employed by the Biomedical Computer Laboratory

CASE PRESENTATIONS

In "Roentgen Rounds", a monthly feature of Orthopaedic Review, Mallinckrodt Institute residents present a case as an unknown followed by pertinent discussion of orthopedic interest. Developed under the direction of Dr. Louis Gilula and editorship of Dr. Tom Staple, the case presentations have proven an excellent means for residents to develop their skills in paper writing and publishing. To date, over twenty-five have been published.



Leesa Gornish, Programmer



Marcella Hooks, Billing Clerk



Paula Ryan, Secretary



Fred M. Domke

where he was involved in the development of the Medical Care Group automated information system.

Fred and his wife, Laurie, reside in Glendale and are the owners of a unique catalpa tree, 5 feet in diameter. Laura spends her workdays in the Merchants Exchange where she does accounting for Checkerboard Grain.

The Domkes have many hobbies ranging from woodworking, restoring antiques, camping, gardening and pets (dogs, cats, and fish). As to the breed of dogs, Fred tells us, "One is brown and one is beige — the brown one is the mother of the beige."

STUDENT FELLOWSHIPS IN RADIATION ONCOLOGY

The Division of Radiation Oncology will again this summer offer ten week clerkships to medical students who have completed their first year of medical school. Now in its sixth year, the program offers clinical experience and/or laboratory research to students from Washington University and other mid-west medical schools. Coordinating the program are Fransiska Lee, M.D., and Carlton C. Stewart, PhD.

New Faces

When you meet **Mary Ann Hederman**, Medical Coder in Radiation Oncology, you'll probably mistake her blonde good looks for a model. Would you believe, she'd rather play softball and tennis?

Charlene Aubin, R.N., Assistant Supervisor of Nursing, is a native of Lansing, Michigan. She attended Lansing Community College, University of Cincinnati, and Florissant Valley Community College. Charlene and her husband, Bob, love to travel. He's an expert gardener and she's a gourmet cook.

Jean Henderson, R.N., Assistant Supervisor of Nursing, is married and the mother of two daughters: Shari, 13, and Nancy, 12. Her husband, Larry, is an engineer with McDonnell Douglas Aircraft. A graduate of Florissant Valley Community College School of Nursing, Jean previously worked at St. John's Mercy Hospital.

"Thanks, Diane, we needed that!" She was reared in Gardner, Massachusetts but when **Diane Hasey**, Medical Secretary in Radiation Oncology, came to St. Louis in 1968, she liked our fair city so well, she decided to stay. Diane has completed 1½ years of nursing training and has been associated with Washington University Medical School for four years, transferring to Mallinckrodt from Otolaryngology. She and her 18 year old son, Kevin, live in Affton. Diane is a versatile girl, too, in off-duty hours. She's an avid gardener and loves traveling, boating, and painting.



Mary Ann Hederman, Medical Coder



Charlene Aubin, R.N.



Jean Henderson, R.N.



Diane Hasey, Medical Secretary



Michael Watson



Maudelle Johnson



Linda Hendrixson



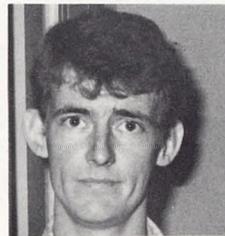
Geraldine Arnold



Debbie Brown



David Courtois



Wayne Robinette



Anita Zinn

John Martin, Senior Electronics Technician in Radiation Sciences, was born in Springfield, Missouri and served 10½ years in the U.S. Air Force where he attended Electronic Technical School. A member of two engineering societies, the Biomedical and the Broadcast, John was previously chief engineer for radio and cablevision stations in Kokomo, Indiana. His wife, Barbara, is an account executive for Maritz Travel Corporation and they have a 6 year old daughter, Mary.

Emilee London, R.T., new member of the second floor technology staff, is the wife of radiologist, Dr. Mark London, and the mother of a 11 year old daughter, Suzanne. She received her B.B.A. from Southern Illinois University in Carbondale and took her technology training through Georgetown University Hospital, Washington, D.C.

Emilee's hobbies are photography, plants, Pekinese and Cockapoo (Cocker Spaniel and Poodle) dogs.

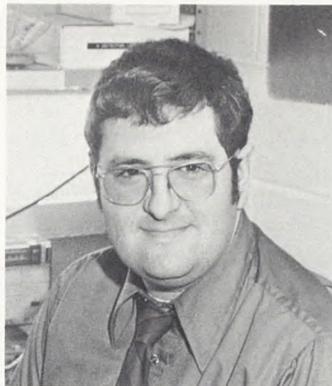
Offering a new dimension of patient help and service in Radiation Oncology, social worker **Laurie Braun** has recently joined the Mallinckrodt staff.

Laurie's job involves helping patients and their families adjust to illness and to radiation therapy as they identify and deal with their concerns and problems. She likewise provides the clinical staff with a better understanding of these patients'/families' concerns. Where needed, Laurie provides patient assistance through available community resources and transportation arrangements. Her work day is divided between the clinical area of Radiation Oncology and inpatient visitation.

A native of New York, Laurie graduated with a B.A. from the University of Rochester and received her M.S.W. from Washington University.

If you meet an attractive brunette with sparkling brown eyes, on your next visit to Radiation Oncology's offices at 4511 Forest Park, she's **Alice Becker**, new secretary in the Division. Alice received her B.A. from Washington University and we hear she's a whiz at needlepoint, knitting, sewing — all kinds of handicrafts — but from the array of flourishing plants and hanging baskets around her office, she's also endowed with a "green thumb."

Jim Bryan is a new Research Technician in Cancer Biology. A native of Muncie, Indiana, Jim received his B.S. and M.S. from Ball State University. His wife, Carole, is a medical technician in Barnes Hospital Blood Bank. Their hobbies are diverse and interesting: Jim enjoys bicycling, canoeing, and photography while Carole's artistic interests are macramé and pencil sketches.

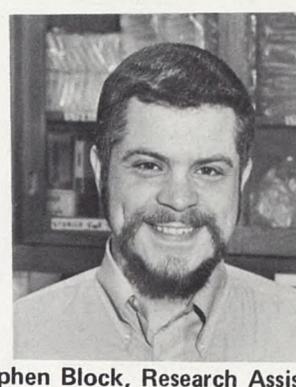
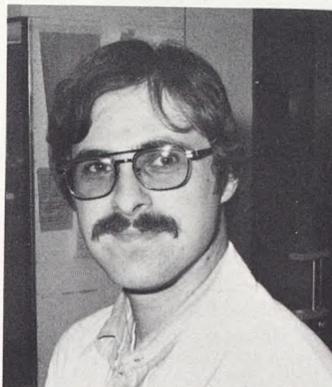


John Martin, Senior Electronics Technician Emilee London, R.T.



Laurie Braun, Social Worker

Alice Becker, Secretary



Jim Bryan, Research Technician

Stephen Block, Research Assistant

"LIFE LINE"

A pilot research project that conserves human life has been initiated by the Department of Surgery and Department of Pathology in the Washington University Medical Center. It is called "Life Line".

Designed to increase the availability of tissue and organs for transplantation, the project will pair recipient need to donor availability and data on potential donors who enroll will be stored in a computer to facilitate a timely recognition of a willing donor who faces imminent death. Matching of donated organs to potential recipients will be done using existing computer recipient lists.

Several important functions of the program will be preformed by nurse-clinician, Marge Maeser, whose role will involve identification and registration of potential organ donors (daily rounds of Medical Center critical care areas), and acting as a liason with the transplant surgeons.

Serving as chairman of the project is Dr. Samuel B. Guze, Vice-Chancellor for Medical Affairs of Washington University and medical directors are surgeons, Dr. Charles Anderson and Dr. Edward Etheredge.

Initial publicity will be centered in periodicals published by component institutions of the Medical Center and an explanatory brochure is being prepared for mailing. A "Life Line" telephone number (454-2911) has been established for calls and inquiries concerning the program. Executive director is Jane Straeter.

The initial application will have a limited population base, namely the personnel with their family units, employed by Washington University Medical Center. Success of the project will be

indicated by the number of individuals registered in the Lifeline computer. Should this pilot project in the Medical Center prove to be an effective means of increasing the supply of potential donors of organs and tissues for transplantation, then it may serve as the prototype organization that can be extended to a much needed national program.



Charles B. Anderson, M.D., Medical Director of Lifeline, explains an important point of the project to members of Lifeline's Community Advisory Board. Represented on the Board are the St. Louis Heart Association, Kidney Foundation, Diabetes Association of St. Louis, The Lion's Eye Bank and the St. Louis Society for the Blind. Pictured to the right of Dr. Anderson are Jane Straeter, executive director and Mrs. Morton D. May of the Lifeline Board of Directors and initiator of the project.

"Tomography vs. Scanning"

Dr. Mokhtar Gado told a seminar at Rush Medical College that tomography is more effective than radionuclide scanning in detecting brain tumors, but it is unlikely to completely replace the older neurologic diagnostic procedures. His statement reflected the results of a retrospective study of 94 patients with brain tumors. The patients, seen between March and December, 1974, underwent both tomography and radionuclide scanning, and the tumors were in all cases confirmed by surgical exploration or at autopsy. Computerized tomography detected 85 tumors while radionuclide scanning revealed 79 tumors.

"Tomography better demonstrates the effect a mass is having on intracranial structures. It also demonstrates the precise location of a lesion. This

information, valuable to surgeons, could previously be obtained only by invasive neurologic procedures," said Dr. Gado.

One area where tomography and brain scans seem to be equally effective is in the diagnosis of stroke. Dr. Gado reported, "We did a study of 40 patients, and the detection rate for both methods was 50%."

The number of brain scans and pneumoencephalographic examinations at Mallinckrodt Institute has fallen by 60% but less change has occurred in the number of cerebral angiograms. "What is important is that many patients have been spared angiography as a screening procedure even though most patients who undergo surgery still have angiography first," said Dr. Gado.

Congratulations, Sheila and Joe

The Doerhoff family was recently featured as "Residents of the Month" by the Mansion House of St. Louis. Sheila is a Medical Transcriptionist at Mallinckrodt and Joe is employed by Old Judge Coffee Company. Their sons, Joey and Chris, attend schools only minutes away from their home in the center tower of the Mansion House, and the family enjoys their Sunday walks to church at the historic Old Cathedral.

Life in the riverfront area provides a fascinating scene for Chris, who is 4, and Joey, 6; boats, helicopters, planes, barges, cranes and workmen high above some of the buildings in the redevelopment of Downtown St. Louis. Sometimes Don Miller's traffic helicopter flies almost within hands' reach of the living room window of their 19th floor apartment.

The Doerhoff family loves the ocean and consequently have spent several vacations on the west coast of Florida, the Paradise Island off Nassau, and the Florida Keys. This summer, in addition to a vacation in St. Petersburg, Florida and Disneyland, the Doerhoffs are hosting two students for three



Sheila and Joe Doerhoff, Joey and Chris

weeks from the Stuttgart Germany Youth Choir. The choir will be participating in the Bicentennial Celebration of St. Louis and the Strassenfest.

We congratulate them on being selected as an ideal family of the Mansion House Center.

Forward into the Past - With Stephen Block and The SCA

In keeping with tradition, Stephen Block, Research Assistant in Cancer Biology, chose the name, "Stephen Ironhand" when he joined the Society for Creative Anachronism for two reasons: it is a medieval sounding name and it fits the character he would choose to have been had he lived in medieval times.

Stephen tells us the idea behind the Society is to teach people about the Middle ages by selectively re-creating those same Middle Ages.

A member (3000 of them all over the U.S. and Canada) picks a medieval costume, makes and wears that costume at Society events such as Tournaments, Feasts, and Revels.

In the *Tournaments* of the SCA, medieval styles of fighting on foot are re-created, using wooden replicas of different types of medieval weapons — sword, mace, axe, etc. Fighters wear helmets, gloves, and various other items of armor. The winner of a *Crown* Tournament (held each May and October) becomes the next king. (We're betting on Stephen!) In the category of more peaceful activities, at a Society *Feast* the company dines on a mighty array of dishes prepared according to the most authentic — and palatable — recipes to be found. At *Revels*, the

performing artists — singers, dancers, musicians, magicians — entertain the company.

In between events, the Society researches and works on arts and crafts such as calligraphy, silversmithing, jewelrymaking, and armoring, all of which were done sometime, somewhere, before 1650. Why, all this before 1650? by then, romance and romantics were dying; gunpowder was a mighty force!



Stephen Block, right, duels in medieval tournament.

MIR

CALENDAR OF EVENTS

May 10, 1976

CITY WIDE RADIOLOGY CONFERENCE
Scarpellino Auditorium, Mallinckrodt Institute, 5:30 P.M.

May 20, 1976

4th DISTRICT M.S.R.T. MEETING
Election of Officers
Incarnate Word Hospital

May 27-29, 1976

NATIONAL CONFERENCE ON RADIATION ONCOLOGY
San Francisco, California

June 8-11, 1976

SOCIETY OF NUCLEAR MEDICINE
Dallas, Texas

July 3-8, 1976

AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS
Honolulu, Hawaii

September 21-24, 1976

AMERICAN ROENTGEN RAY SOCIETY
Washington, D.C.

September 23-25, 1976

MISSOURI SOCIETY OF RADIOLOGIC TECHNOLOGISTS
ANNUAL CONVENTION

Lake of the Ozarks
Osage Beach, Missouri

November 14-19, 1976

RADIOLOGICAL SOCIETY OF NORTH AMERICA
Chicago, Illinois

FOCAL SPOT

Published quarterly by the Public Relations Department for staff, students, and friends of Mallinckrodt Institute of Radiology, 510 South Kingshighway, St. Louis, Mo. 63110



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Photographer

Published by
The Public Relations Department of
The Edward Mallinckrodt Institute of Radiology
510 South Kingshighway
St. Louis, Missouri 63110

Non-Profit Organization
U.S. Postage
PAID
St. Louis, Missouri
Permit No. 1032

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