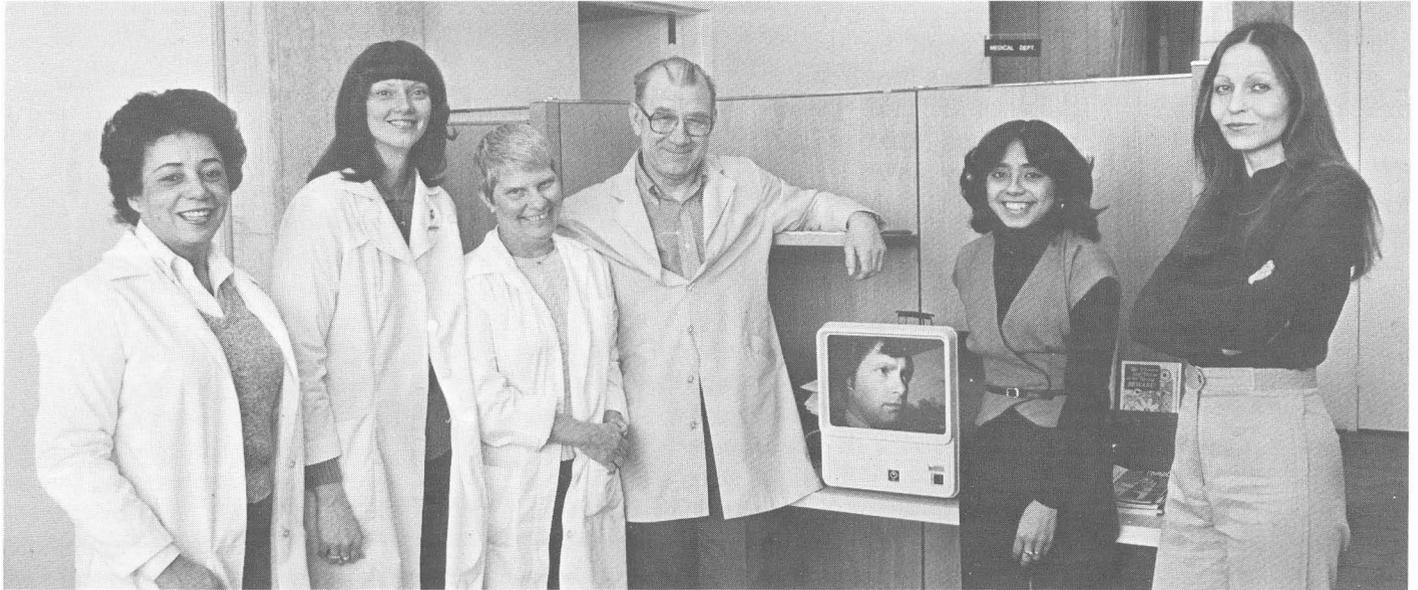


FERMINES

Fermi National Accelerator Laboratory
August 20, 1981

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Members of the medical staff, with the viewer, are (from left) Doris Thurston, Rosetta Janowiak, Dorothy Poll, Dr. Charles Lang, Rosie Romo and Sharon Koteles.

VISUAL AIDS ENHANCE EDUCATION FOR MEDICAL OFFICE

You may have been planning to see one or more of four loop films on health, but never got around to it.

This article is to remind you that the Medical Office, on the west side of the first floor in Wilson Hall, has the very health subject that may be most important to you. A loop film is a series of color photographs that automatically advance and

are accompanied by music and sound. Each film runs about 10 minutes.

The topics are: "Stress Tension and the Relaxation Response," "Weight Control," "Exercise for Fitness and Health," and "Diet and Your Heart."

There's no need to make an appointment. Just come to the office and tell the receptionist which film you'd like to see.

NEW EQUIPMENT IMPROVES ELEVATOR SERVICE

Some of you may have noticed that two of the four passenger elevators in Wilson Hall start and stop more smoothly as well as move more rapidly between floors. The two elevators--one on each side--are those that run from the basement to the 16th floor.

What you may not have noticed is that there are fewer service calls and less down time, all at a dollar savings to Fermilab. This has all come about because of an effort by the Laboratory to upgrade and improve elevator service at Wilson Hall. Two new motor generators--one for each elevator--have been installed on the 16th floor. They are heavier duty equipment than their predecessors and better fitted to handle the stringent demands required of them.

The old motor generators were 25 horse-

power on the AC side and 20 horsepower on the DC side. The new ones--manufactured by Imperial--are 30 horsepower, AC, and 26 horsepower, DC. "These new motor generators are outstanding performers," said Fred Moore, manager of tenant operations and the man primarily responsible for seeing that the elevators are maintained and in operation. Moore says with a wry grin that there are a few more problems to resolve yet.

John Paulk, head of Site Services, explained that the Laboratory has been doing what it can to improve the reliability and performance of the elevators. "The bigger MG sets seem to be doing the trick," he said. "We plan to get new MG sets for the two remaining elevators as soon as we can find the money."

MOTORISTS, THIS IS FOR YOU: HOW TO MAKE THE ROADS SAFER FOR YOU AND BICYCLISTS

Ever think about it this way? Bicyclists are vehicle operators too, with the same rights and privileges as motorists, the Fermilab Safety Section and Fermilab Bicycle Committee point out.

"Too often motorists disregard bicyclists or forget they are entitled to use most streets and highways just as much as motorists are," said Jim Smith of the Safety Section. He gives us 10 tips that will help motorists drive more safely with regard to bicyclists.

Ten Important Rules

1. Always allow a reasonable clearance--say about three feet--when overtaking a bicycle moving in the same direction and keep that clearance until you have cautiously passed the bicycle.

2. When you are about to pass a bicyclist, if you feel it necessary, alert the rider with a short "toot" of your horn, not a loud blast.

3. Do not drive on a marked bicycle lane unless you are crossing it. When you do plan to cross a bicycle lane, remember that the bicyclist has the right of way.

4. It is essential to dim your headlights at night when approaching a bicyclist.

5. Always look over your shoulder for bicycle riders, as well as oncoming cars, before you open your car door on the traffic side.

6. When you are driving a vehicle with a large right side rearview mirror, don't forget to allow extra distance when passing a bicyclist.

7. Always watch out for bicyclists who might suddenly swerve in front of your motor vehicle with little or no warning as they attempt to go around a hazard, such as a pothole. Remember that there are bicyclists who ignore traffic signs and signals, who stunt ride and who may be on the wrong side of the road.

8. Never turn sharply in front of a bicyclist or crowd a rider off the road.

9. When you change lanes or make a turn, watch out for bicyclists who may be in your blind spot.

10. Remember that bicycles are considerably more vulnerable than vehicles, and motorists must share the road with them. Most general traffic rules apply to bicyclists, and they, like you, are required to also obey traffic signs and signals.



A subtle but extremely dangerous situation is being staged here by Steve Smith of Fermilab. As he swings his bicycle out into traffic to pass a parked car, the driver of the vehicle behind him should be alert enough to also turn out in order to give the bicyclist more room. But the oncoming car (right side of photograph) keeps the light-colored car from turning out too far. The result is that the bicyclist may be forced into the parked car or hit by the car coming up on him from behind. In this situation, the motorist in the middle car should not have attempted to pass the bicycle rider at that particular time.

MEET THE NTF STAFF

Staff members of the Neutron Therapy Facility are Frank Hendrickson, M.D., head of medical affairs and a radiation oncologist; Lionel Cohen, M.D., deputy head and a radiation oncologist; Miguel Awschalom, Ph.D., medical physicist and deputy department head; Parvathy Kurup, M.D., radio therapist; Ivan Rosenberg, Ph.D., and Randal Ten Haken, Ph.D., both medical physicists.

Also, Barbara Bennett, radiation therapy and chief technologist; Brian Pientak, radiation therapy technologist; JoAnne Mansell, R.N., P.A., clinical data coordinator and oncology nurse; Bonnie Sue Deke, LPN, data manager and oncology nurse; and Michelle Gleason, secretary.

SOMETHING NEW HAS BEEN ADDED

Something new has been added to NALREC's distinguished buffalo chip throwing contest. This fourth annual event Aug. 21 has been embellished with a watermelon seed spitting contest.

That's right, it'll be double fun from 5:15 to 9 p.m. at the Village Barn. There'll be sloppy Joes, chips and watermelon to nibble on. So for additional information, contact your nearest NALREC representative.

But that's not all. The Running Fox Bluegrass Band of Plainfield will provide the appropriate thematic music throughout the evening. This popular band was formed about eight years ago and took its name from the hit song, "Fox on the Run."

It has played at restaurants, benefits and bluegrass festivals throughout the Aurora and Joliet areas. Members primarily play old ballads and instrumentals, but make excursions into old-time country music and the occasional new song



Running Fox Bluegrass Band

that can be adapted to bluegrass style.

Band members are Jim Bornoski, fiddle, guitar and vocals; Bob Patterson, bass; Larry Robinson, guitar, dobro and vocals; Myran Sauer, banjo, mandolin, guitar and vocals; Brad Wise, banjo; and Warren Moody, fiddle. Fun, music and food, three wonderful vices for a lazy August evening.

AEROBIC DANCE CLASSES OFFERED

Pat Yost asks, "Want to get in shape and have fun too?"

Then why not join an aerobic dance class? Classes will be offered for continuing dancers as well as for beginners at the Barn in the Village. Classes will be held on Mondays, Tuesdays and Thursdays from 5:15 to 6:15 p.m. for continuing dancers and from 6:15 to 7:15 p.m. for beginners.

The first 10-week session will begin on Aug. 31. Sponsored by the Aurora YMCA, a course costs \$50 and can be paid for at the first class.

"So don't hesitate," exclaimed Pat. To register and for more information, call her at ext. 4365.

RUNNING CLUB TO COMPETE IN ACS MEET

Members of the Fermilab Running Club will compete as a team in the American Cancer Society Run to Wipe Out Cancer Aug. 29.

The 10-kilometer event will begin at 8 a.m. in Glen Ellyn. Other members of the Fermilab community are invited to join the team. They should contact Marv Warner, ext. 4430, for additional details. The ACS will give awards to individuals as well as to teams for outstanding performance.

Club activities are for beginning as well as for advanced runners.

COOPERATIVE PLAYGROUP TO MEET

Fermilab's Cooperative Playgroup will hold an organization meeting Aug. 27.

The session will begin at 7:30 p.m. in the Playgroup's facility, 28 Shabbona in the Village. Any parents with children between 18 months and 5 years are welcome to join the co-op. For additional information, contact Brenda Kirk, 232-8648, or Joan Bjorken, 840-3440.

CHEZ LEON MENUS

Aug. 26, 12:30 p.m., \$6--Salad Nicoise, Selection of Quiches, Fresh Green Salad, Melon with Port.

Aug. 27, 7:00 p.m., \$11--Antipasto, Trout stuffed with Mushrooms, Tomatoes baked with Bread Crumbs and Garlic, Broccoli with Lemon Sauce, Avocados filled with Diced Papaya, Pears stuffed with Gorgonzola Cheese.

Aug. 28, 7:00 p.m., \$11--Baked French Onion Soup, Mixed Salad Greens, Surf and Turf, Idaho Baked Potato, Fresh Blueberry Shortcake.

For reservations, call ext. 3082.

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NTF NEARS FIFTH ANNIVERSARY

The Neutron Therapy Facility at Fermilab is rapidly maturing into one of the foremost research centers in the world for the treatment of cancerous growths with neutrons. Just recently, the facility has seen its 1,000th patient.

It is only the second such facility in the world to have reached the 1,000-patient level. The other is Hammersmith Hospital in London which has been treating patients with neutrons for 12 years. Dr. Frank Hendrickson, director of the NTF here, said the rapid growth of Fermilab's NTF is an "indication of the outstanding cooperation and support we have received from the medical community for our research program. It's also a measure of our ability to respond to the health care needs of our community and to interact with our patients in a manner that inspires their confidence."

Future Points to Chicago

This fall the Fermilab NTF will observe its fifth anniversary. What the future holds is not fully certain at this time, according to Dr. Hendrickson, but it is reasonably certain that the facility will eventually move its research program to what is known as the West Side Medical Center in Chicago. This is the largest composite medical center in the world with 5,000 patient beds, two universities, three medical schools, a county hospital and a Veterans Administration hospital. The advantage of moving to this complex, Dr. Hendrickson pointed out, is that the patients will be closer to the treatment facilities, and the NTF would be part of a comprehensive health care environment.

The Fermilab NTF has the highest energy neutron beam in the world for treating patients. It can reach deeper into tissues than less powerful beams. The neutron beam is generated from the 66 MeV proton beam of the Linear Accelerator. (Energy and intensity are two different characteristics

of a neutron beam. The intensity determines how long a patient has to be exposed to the beam for the required dose.)

"Our experience in the five years we have been treating patients here," said Dr. Hendrickson, "has shown us clearly that we can treat them safely. Safety, of course, is extremely important and is one of our highest priorities. We also know that some selected rare tumors and some of the common tumors respond better to treatment with neutrons than to the more conventional treatments."

Some Results Promising

The NTF director said that treatment of salivary gland cancers, for example, "really seems to go better with neutron therapy when compared to the traditional methods." He added that "we think some of the other carcinomas respond more readily to this treatment, but we're not sure. We're still doing research in these areas."

Dr. Hendrickson and other cancer experts around the world are conducting extensive research on how well neutrons will eradicate or at least bring under control these life-threatening tumors. It is too premature at this time for them to make precise statements one way or the other. Too much work still remains to be done. However, Dr. Hendrickson did note that "we are excited and encouraged by what we are finding."

Proud of Work

Dr. Hendrickson and his associates are proud of their research, which is highly regarded by other medical scientists. As Dr. Hendrickson explained, "We are a participant in the neutron therapy research that is going on around the world. We are a major contributor in the number of patients who have been treated." He went on to add that "there is great pride in the work we do here and a high degree of cooperation among the area physicians in our research effort. This unusually high level of cooperation and trust that we experience is quite remarkable. The auspices of Fermilab and the Universities Research Association have been a stimulus in motivating us to work to-

gether in a way that has more cooperation and is less competitive than other centers of medical research have been able to achieve."

This outstanding esprit de corps that pervades the NTF belies the seriousness with which they go about their business and some of the day-to-day problems that must be overcome. For example, "Our research needs a lot more patients than we have seen so far," Dr. Hendrickson said. "There are about 300 diseases that physicians call cancer. They are different from one another, require different treatments and have different prognoses. We still need to do research on many of these cancers. What we learn about one cancer, we believe we can apply in general to the treatment of other cancers. But, we need to do considerable more research."

Interesting Poll Results

It is interesting to note, Dr. Hendrickson also said, that polls have shown the public fears cancer more than any other medical problem, including blindness, loss of a limb, or heart disease. The management of cancer is a matter of national concern, the NTF director emphasized.

"While some of our findings look good, treatment with neutrons is still primarily a research effort that takes a lot of patients from a cooperative group of private physicians and institutions to resolve the question: Are neutrons an effective treatment or not? We have no answer yet."

Cancers that remain in one place in the body and do not spread to other areas are more suitable for treatment with neutrons, Dr. Hendrickson explained, because the beam is aimed much like a gun at a specific target within the body.

Meticulous calculations and care go into treating patients with this beam. The NTF team makes every effort to ensure that as much of the cancer and as little of the surrounding healthy tissue as possible is irradiated with the neutron beam. Small differences can be critically important, and the team leaves little to chance. "We can pinpoint the beam with good precision," the NTF director said at a seminar on neutron therapy held at Fermilab earlier this year.