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UNIVERSITY OF OREGON
HEALTH SCIENCES CENTER
NEWS

*Health Sciences Center News is published by the University of Oregon Health Sciences Center to inform students, employees, faculty and friends of the institution of programs, activities and events of interest to them.*

# Dr. Bluemle to head Thomas Jefferson University

Dr. Lewis W. Bluemle, Jr., president of the Health Sciences Center, was named third president of Thomas Jefferson University, Philadelphia, May 2. Dr. Bluemle will assume his new post August 1.

With about 2,000 students, Thomas Jefferson is the nation's largest private medical training institution and has produced more alumni than any other single American medical school.

In announcing the election, William W. Bodine, chairman of Thomas Jefferson's Board of Trustees said, "The University is exceedingly fortunate to have Dr. Bluemle as its new chief executive officer. His medical, educational and administrative experience and accomplishments are impressive."

Dr. Roy Lieuallen, chancellor of the Oregon State System of Higher Education, expressed profound regret over Dr. Bluemle's decision and complimented him on his accomplishments during his two-and-one-half year tenure as first president of the HSC. "We will move as rapidly as is appropriate to appoint a committee to search for a new president of the Center and, of course, will be appointing an acting president on Dr. Bluemle's departure to serve in the interim."

He went on to cite consolidation of the University Hospital and efforts to put it on a sound financial footing, major new appointments along with a new administrative structure, strengthening the School of Nursing, formation of the HSC Advisory Council, work toward improving ties within the community, his commitment to accountability at all levels and improving credibility of the institution, among those positive steps taken during Dr. Bluemle's presidency.

Advisory Council Chairman, Ira C. Keller, said, "I want to express great appreciation to Dr. Bluemle for the major contributions which he has made toward solving the very difficult problems of our distinguished institution. These problems were largely the result of the dramatic change in health care which has occurred in the last few years. No longer can a medical school be dependent upon charity patients and no longer can a public hospital expect to compete with a private hospital unless the surroundings and services are comparable.

"Under Dr. Bluemle's leadership, great strides have been made in solving the problems of the teaching hospital and in modernizing business methods of the entire institution. In addition, capable new deans have been selected for Nursing and Medicine. Dean Terkla has continued the wise guidance which has made the School of Dentistry so outstanding. The Council very much regrets Dr. Bluemle's leaving, but we believe that the progress he has made will make the road smoother for his successor."

# Cleland selects Marquam Hill site for new hospital

Max Cleland, administrator of veterans' affairs for the Veterans Administration in Washington, D.C., announced his decision April 8 to build the new Portland Veterans Administration Hospital on Marquam Hill at the site of the existing VA hospital, and to continue a permanent but diminished VA operation in Vancouver.

In making his announcement, the new VA administrator added his stamp of approval to the same site for the new hospital selected last year by the VA, but he reversed the prior VA decision to discontinue all VA activity in Vancouver with the opening of the new Portland hospital.

Referring to the nearly year-long controversy that has existed since plans for the new hospital were first announced, Mr. Cleland said he spent more time studying the issues involved than he has devoted to any other VA matter since his appointment was confirmed by the Senate February 25.

He also personally inspected the different sites, toured both VA hospitals, and conferred with officials at Emanuel Hospital and the Health Sciences Center during an April 1 visit to Portland.

"I have consulted in depth with members of Congress who have been so interested in plans for the new hospital, and I think I have fully considered all the options proposed by every source," he said.

Administrator Cleland explained that the new complex on Marquam Hill will provide 890 beds, and that the total estimated construction cost for both the hospital and the added Vancouver facilities is $154.6 million.

The 890 bed total will include 310 beds for internal medicine; 280 for surgery; 120 for nursing home care; 90 for psychiatry; 50 for rehabilitation; and 40 for neurology. Thirty of the 90 beds designated for psychiatric care will be devoted to drug and alcohol treatment.

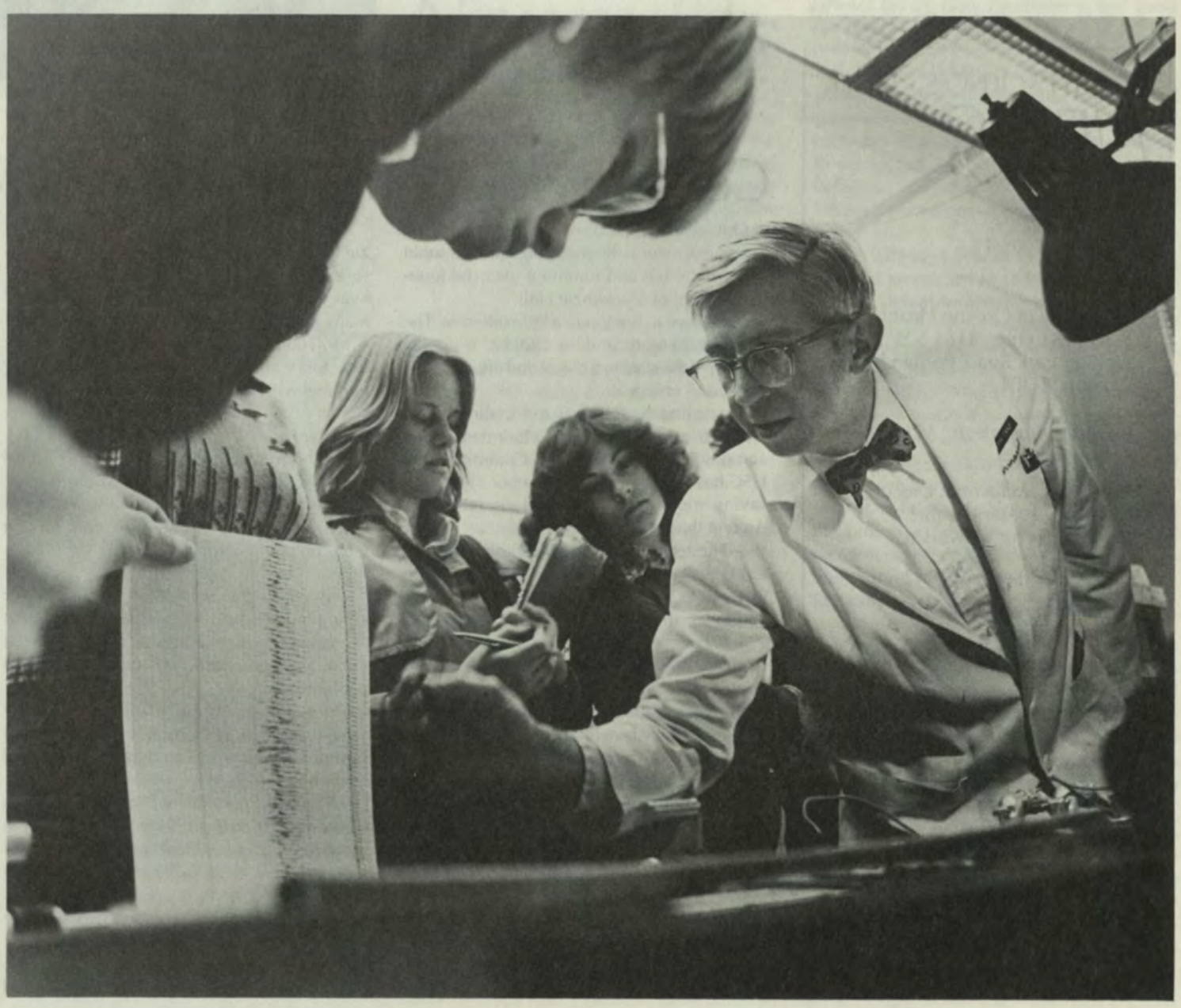
*(continued on page 4)*

## Visiting students find field trip "amazing"

"Inspiring," "thought provoking," and "amazing" were the words used by the advanced biology class from Lake Oswego High School to describe what they saw March 28 at the Health Sciences Center.

Hosts for the touring students were Dr. Ralph Tanz, associate professor of pharmacology, who, in the photo on the right, demonstrated to students how various chemicals affect an amimal's heart; Dr. William K. Riker, professor and chairman of the department of pharmacology; Dr. John M. Brookhart, professor and chairman of the department of physiology; and Dr. Reid S. Connell, associate professor of anatomy.

Following the afternoon-long series of demonstrations and explanations, one student commented, "This is one of the best field trips I have ever taken part in. It was educational and fascinating. It helped destroy any myths I might have had about science being a dull field with only boring scientists in it. For possibly the first time, I was able to appreciate the human element in the field of science."



# *Model clinic sets high standard for outpatient care*

*A new model teaching clinic, which hospital administrators believe will set a standard for outpatient care at the HSC is nearing completion this month.*

For a university hospital interested in providing a better mix of diseases, increasing incentives for ambulatory care, and providing a more realistic environment for physicians in training, it is a natural.

Now nearing completion on the third floor of the Outpatient Clinic, a new teaching clinic—known as the Medical Practice Group—will model its operations and physical appearance after those found in private medical practice.

If all goes well, explains Director of Outpatient Services John Hutchins, the Medical Practice Group may be emulated in other areas of the Outpatient Clinic.

Moving to staff offices located within the new clinic are four faculty members in internal medicine, Drs. Curtis Holzgang, Marion Krippaehne, Joe Anderson, and David Cook. The Medical Practice Group will also include residents, medical students, and nurse practitioners, and will emphasize the team approach to providing health care.

Each patient will be assigned a specific faculty member or resident who will continue to see him or her for all appointments. Staff will be on call 24 hours a day, seven days a week, and patients may contact their physicians by telephone after regular hours.

One of the new clinic's most outstanding features is "single class" care. In other words, private and non-private patients—regardless of referral route or ability to pay—will be seen in the same clinic facility.

Hospital administrators believe the clinic's attractive appearance and emphasis on physician-patient rapport and continuity of care will improve the mix of patients and diseases needed for training residents and students.

Traditionally, the medicine clinic has treated a large proportion of chronic illnesses of the elderly and indigent. The new Medical Practice Group will aim to attract a more typical spectrum of patients who, otherwise, desire private care.

As in private practice, medical and clerical staff will be expected to take time to define their referral expectations to community physicians and agencies, and to solicit appropriate referrals from the community.

*One of the clinic's major goals is to merge private practice attitudes with the educational environment of the university.*

In addition to improving the teaching environment, this practice will help the Group reach its financial goal of self-sufficiency.

If the Medical Practice Group is successful in achieving this goal, it will set a standard for the entire Hospital/Clinic operation which is expected to increase patient revenues.

"Implementation of the Medical Practice Group is the first step toward creating private practice attitudes, facilities, and services within the university clinic," said Mr. Hutchins.

He reiterated the Group's major goals, which, he explained, are also long-range objectives for the entire Outpatient Clinic:

1) merge private practice attitudes with the educational environment of the university;

2) provide a broad disease spectrum in order to maximize the educational opportunities and increase trainee interest in primary care;

3) provide a financial mix of patients which will increase institutional revenues to support the growth and development of ambulatory care programs;

4) provide adequate manpower for the patient care and educational needs of the ambulatory care setting; and

5) provide a relevant educational experience in primary care.

Construction on the new clinic began in late January on the third floor medicine area of the Outpatient Clinic.

# Gonorrhea studies may one day lead to vaccine

Research studies on gonorrhea, the most widespread reportable sexual disease in the United States, are underway at the Health Sciences Center with federal and private funding support.

The National Institute of Allergy and Infectious Disease (NIAID), the U.S. Public Health Service (PHS) and Miles Laboratories are providing funds totalling approximately $455,000 for research conducted from late 1976 until 1981. The individual projects range in length from two to five years.

Dr. Stephen Morse, associate professor of microbiology and immunology at the UOHSC, directs the NIAID and PHS projects. He and Dr. Barbara Iglewski, also an associate professor of microbiology and immunology, are co-investigators of the Miles Laboratories' project.

Dr. Morse, recently elected vice-chairman of the general medical microbiology division of the American Society for Microbiology, will present a major paper on the HSC research at a scientific meeting in New Orleans in May.

The HSC researchers are concentrating on studying the basic biology of the micro-organism, Neisseria gonorrhoeae, which causes the disease.

"If we can better understand the micro-organism that causes gonorrhea, how that micro-organism survives, grows, produces disease and modifies itself in relation to the host environment, that knowledge can be used possibly to develop a better diagnostic test or a vaccine." Dr. Morse explained.

A government research report on Sexually Transmitted Diseases issued last fall said epidemiologists believe vaccine may be the answer to the control of gonorrhea because traditional methods of controlling gonorrhea, syphilis and other venereal diseases—treatment with drugs such as penicillin—haven't been completely effective.

The National Center for Disease Control reported mid-March of this year that there has been a slowing of the rate at which venereal disease is increasing in the U.S. but also cautioned that these gains could be threatened by a new strain of gonorrhea that is resistant of penicillin.

*Extracting antigens from Neisseria gonorrhoeae are Dr. Morse and graduate student Debra Leith.*


HEALTH SCIENCES CENTER
NEWS

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University of Oregon Health Sciences Center, 3181 S.W. Sam Jackson Park Road, Portland Oregon 97201

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# *Center-wide conservation effort is underway*

One of the first signs of spring at the Health Sciences Center is the sight and sound of sunlit water churning and tumbling over the fountain in front of Mackenzie Hall.

But this year, things are a little different. The fountain is empty, and the UOHSC is joining the rest of the state in a concerted effort to save water and energy.

According to Ralph Tuomi, director of facilities management and chairman of the campus Energy Conservation Committee, the HSC has already begun a number of energy-saving measures and has plans for more. Among those already begun are:

—The temperature in all buildings except the Hospital and clinics has been reduced to 68 degrees. The heat is now off in storerooms and other unused areas.

—Whenever possible, the heat and fan systems are now turned off in buildings not occupied at night. Although the systems are turned on again early each morning, employees may be a little chilly for an hour or so.

In some large buildings, the temperature climbs rapidly initially—and later falls—when the fan system is shut off.

—Physical Plant personnel have removed some interior light bulbs and have reduced the number of exterior lights on campus. Custodial staff are being asked to keep on as few lights as possible at night.

—Water temperature in the hot water system has been reduced.

—The Alumni fountain in front of Mackenzie Hall is off. The fountain not only requires several thousand gallons for an initial fill (water is continually recycled), but also loses many gallons each day through evaporation.

Mr. Tuomi and other facilities management directors for the State System of Higher Education met with the governor's Energy Commission in April to present their plans for conserving energy.

For this meeting, Mr. Tuomi prepared a list of projects at the HSC which would require funding for modification of existing systems to make them more energy efficient. Among these potential future projects are the following:

—Because the School of Dentistry's air conditioning system uses water only for heat exchange and then sends this water down the drain, Mr. Tuomi proposes construction of a cooling tower.

The tower would continually recirculate the same water, saving thousands of gallons each summer and an untold amount over the life of the system.

—With the present mechanical system in the Research and Basic Science Buildings, the buildings' entire ventilation and exhaust systems must be on in order to keep the fume hood suction systems in operation in the labs.

Mr. Tuomi suggests creating two separate systems so that at night and on weekends, the buildings' major systems could be turned off. He calculates that the revised systems would pay for themselves in electrical energy savings in less than 10 years.

—Flow restrictor devices are being installed in Hospital showers to reduce flow from about 10 gallons a minute to three gallons.

—Mr. Tuomi and other physical plant directors are studying ways to reduce the amount of water used to flush a toilet.

"Some people don't seem to believe there really is an energy crisis," said Mr. Tuomi. "It's hard to convince people—until the crunch really hits."

One unit of the UOHSC is already feeling the affects of the drought. The Animal Research Farm near Hillsboro depends on a well for its water. Because the water table is so low, the 130-foot well will be close to empty by June.

In March, the HSC received approval for funds from the Chancellor's Office to dig a new 700-foot well at the farm.

"We hope to gain cooperation and suggestions about energy conservation from the Health Sciences Center community," said Mr. Tuomi. "We encourage faculty, students and employees to help save energy in as many ways as possible. One way would be to turn off all unused lights throughout the day and each evening upon leaving the office. Energy conservation will require everybody's help."

Other members of the HSC energy committee are John Long, Eugene Bauer, Dr. John Van Bruggen, and Art Mancl, director of campus and building planning for the State Board.

# "Superb" medical, nursing team saves injured youth

One of the most surprising things about 21-year-old Gary Ludi, say his HSC physicians, is the very fact that he is alive.

He is one of modern medicine's miracles—a young man literally snatched from the jaws of death by a remarkable team of health professionals in University Hospital.

Gary's ordeal began last November 5 when he and two friends from his hometown, Burns, Oregon, attended the world land-speed record attempt at the Alvord Desert, near Fields.

After the speed trial, the three headed back toward Burns in a pick-up truck, stopping once at a store. That's the last thing Gary remembers about that day and many that followed.

None of the three recalls how the one-vehicle accident occurred. As the pick-up rounded a curve, it went out of control, flipping end over end five times.

Gary and his friends were thrown through the windshield immediately. As the truck completed its first flip, it landed on Gary.

In those few seconds, he sustained a ruptured spleen, lacerated liver, and trauma to his central nervous system. He also broke half a dozen bones and injured his right lung, in addition to innumerable cuts and bruises. His companions received less severe injuries.

Friends of the victims arrived at the accident soon after and went to the nearby Alvord Ranch for help. The three were taken by ambulance to the Harney County Hospital in Burns.

When Gary's condition worsened within a few days, he was rushed to the Surgical Intensive Care Unit of the Health Sciences Center in Portland.

According to Dr. Gordon Sasaki, chief resident in surgery, University Hospital South, Gary's injuries were extremely severe. He was suffering from what surgeons call "multiple sequential organ failure" as a result of the accident.

Fortunately for Gary, his HSC medical team was able to predict the sequence of failures of his body's systems and plan accordingly.

When Gary arrived at University Hospital, he was already in renal failure. He was immediately placed on kidney dialysis (and continued on dialysis through mid-January).

Soon after, Gary went into liver failure as a result of a deeply lacerated liver. Surgeons operated successfully to repair the damaged organ and remove his injured spleen.

In early December, Gary suffered from shock lung syndrome. Because his body was not receiving sufficient oxygen, he required six weeks of tracheal intubation and reliance on a mechanical respirator.

Two days after Christmas, Gary went into circulatory failure because the pericardium, or sac around the heart, had filled with fluid. In an emergency operation, a surgical team quickly split his sternum and cut a window in his pericardium to drain out the fluid.

Because of trauma to his central nervous system, Gary was in a coma for several weeks after the accident. Even after he regained consciousness, he had only a vague awareness of what was happening to him. His memory of this period is fuzzy, but he does recall once being convinced that he was dead.

"I was sure I was dead," Gary related. "I kept reliving the same moment over and over, and twice I told the doctor I was dead. I didn't believe I was alive until he pinched me really hard."

In early January, an infection in Gary's chest was drained. About two weeks later, a tracheostomy tube was placed in his windpipe—the first step toward weaning him off the respirator.

After they drained an abscess beneath his liver in mid-February, Gary's physicians considered him out of danger. As of early April (*HSC News* press deadline), he still suffered from muscle weakness in one eye, peripheral nerve dysfunction in one leg, and required more time to heal a left femural fracture. (He wears a cast on his left leg.) He is expected to be in the hospital at least through April.

But his spirits are remarkably good, and he is enthusiastic about his rehabilitation.

"I couldn't even spell or write my name a few weeks ago," he explained. "I couldn't do anything. But I've just finished writing two letters; that's an accomplishment. My strength is coming back. A combination of everyone's efforts here at the hospital has kept me going."

He praised his doctors, nurses, physical and occupational therapists, and social workers. "People in every department have been just super.

"I've had it from one end to the other, but it's all looking up now. I really believe this hospital is the best place I could have been.

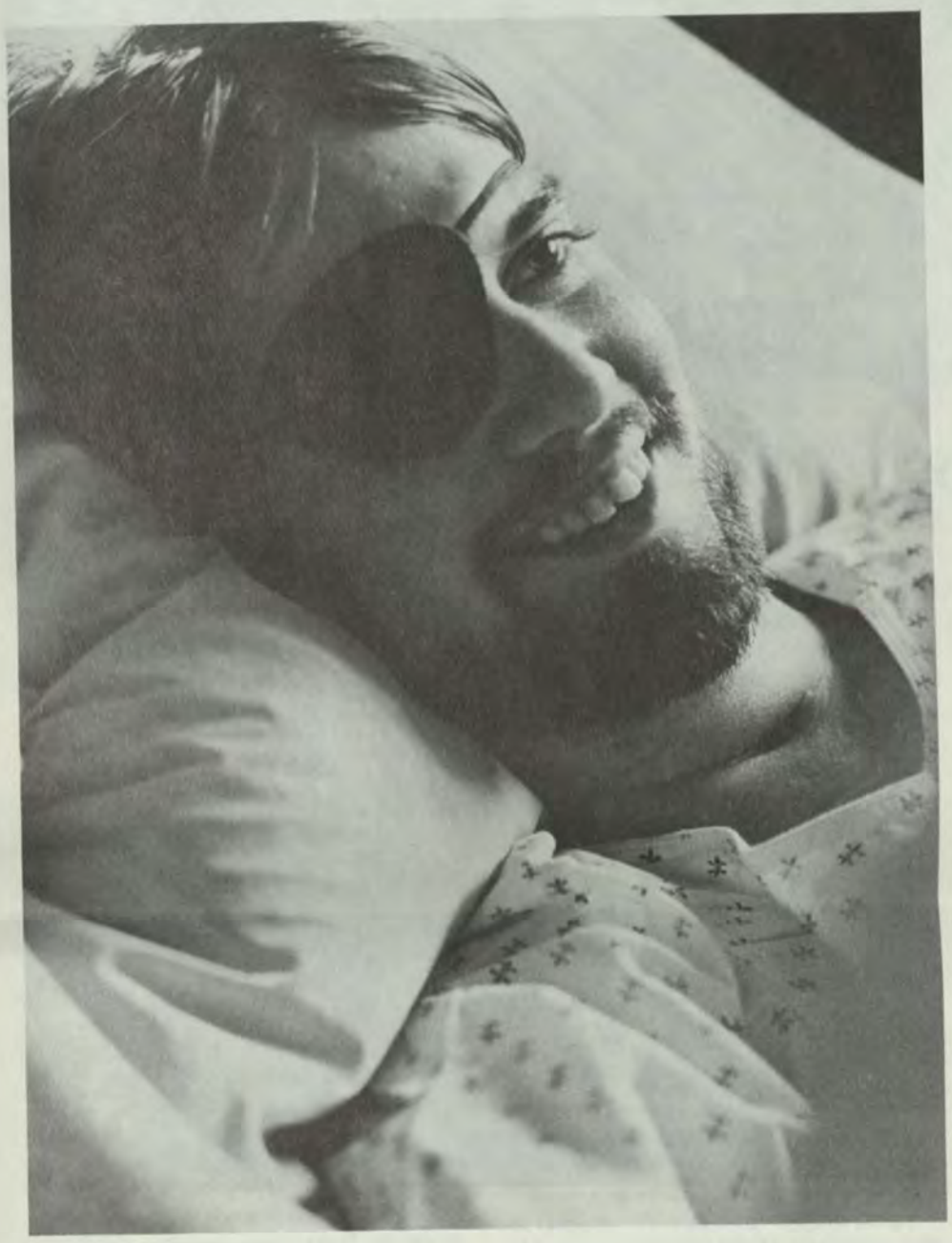
"The doctors and nurses have been great," he continued. "If you don't understand something, they'll take time to explain it to you. When I'm down or upset, they sit down and talk me out of it and make everything look good. I don't think there are any better doctors or nurses in the world."

According to Dr. Sasaki, Gary might have died if he hadn't had two important factors on his side.

"First, he is young, and although his injuries were severe, his body was able to withstand the trauma," explained Dr. Sasaki.

"Second, he had superb medical and nursing teams behind him. Many departments participated in treating Gary's problems.

"Because of their vigilance and because they could predict the sequence of complications, Gary is alive today."



*Gary Ludi smiles at occupational therapist during therapy session in University Hospital.*

## Professor of oral surgery, Dr. Jarabak, dies

**DR. JOHN PAUL JARABAK**
*professor of oral surgery*

Dr. John Paul Jarabak, 61, professor of oral surgery of the School of Dentistry and University Hospital, died April 16.

Dr. Jarabak, who served on the School of Dentistry faculty since 1960, was born in East Chicago, Indiana. He received his bachelor's and doctor of dental surgery degrees from the University of Indiana. He also attended the U.S. Navy Dental School and took residency training in oral surgery at the University of Pennslyvania School of Medicine.

He was chief of dental services for three U.S. Navy hospitals prior to his retirement from the Naval Dental Corps in 1960. That year, he was appointed associate professor of dentistry at the Health Sciences Center. In 1969, he attained the rank of professor. Dr. Jarabak's professional contributions in dental education and research are recognized internationally. He was the author of numerous articles in professional journals.

In 1958, he was named a diplomate of the American Board of Oral Surgery. He was a fellow of the American College of Dentists and a member of the Oregon Dental Association, American Society of Oral Surgeons, and the American Dental Association. Among his professional honors are the Distinguished Services Award from the National Hemophilia Foundation in 1966 and the Best Clinical Instructor Award from the School of Dentistry senior class of 1971.

## *Rediker joins staff*

Kenneth Rediker has joined the School of Dentistry staff in a newly created position as administrative assistant for business administration.

Mr. Rediker is assisting School of Dentistry Dean Dr. Louis Terkla in managing the school's fiscal affairs and developing fiscal management systems.

He came to the HSC in February from Arthur Andersen and Company, Certified Public Accountants, Portland office, where he served as a staff auditor.

## *Newsmakers*

*Hazel G. Hays,* manager of the Albina Human Resources Center and member of the HSC Advisory Council, has been appointed regional manager of the Multnomah County Public Welfare Office. Mrs. Hays, who is now acting administrator of health and social services of the welfare division, will assume her new post July 1.

*Dr. Georgia M. Lee,* Portland psychiatrist, UOHSC alumna, and clinical instructor in psychiatry, has been elected to the board of trustees of the Medical Research Foundation of Oregon. The Foundation provides support for research at the Health Sciences Center as well as for a number of other agencies and projects.

The Johnston's Yogurt "Nothing Artificial Added" Award for outstanding community service has been awarded to the Play to Grow program, which is co-sponsored by the HSC School of Nursing and the Portland Park Bureau. Johnston's Yogurt is produced in Glendale, California.

*Carol Merwin,* head of continuing education for the School of Nursing, has been appointed a site visitor for the American Nurses' Association Accreditation and Approval Program for Continuing Education. She will serve on the Western Regional Accreditation Committee.

A cardiology exhibit on development and use of artificial heart valves at the Health Sciences Center won an award of excellence at a recent meeting of the American College of Cardiology in Las Vegas. The exhibit was assembled by HSC faculty *Drs. Albert Starr, Edward Lefrak, Gary Grunkmeier,* and *Louis Lambert.*

*Dr. William K. Riker,* chairman of the department of pharmacology, has been elected secretary-treasurer-elect of the American Society for Pharmacology and Experimental Therapeutics which is headquartered in Bethesda, Maryland. He will advance to the full position of secretary-treasurer in 1978-79.

The following School of Dentistry faculty received awards at the annual meeting of the Oregon Dental Association in late March: *Dr. William W. Howard,* chairman, department of fixed prosthodontics, received the Journalism Award for "outstanding contributions to dental journalism." This is the second time in Association history this award has been given.

*Dr. H. Cline Fixott,* professor, department of oral radiology, was awarded the Presidential Citation which read, in part, "has given unselfishly of his time and talent to the betterment of the profession and the Association. Special recognition is hereby made for his contribution to the Boy Scout and Explorer programs for many years."

*Marilyn Paul,* technician in the Heart Research Laboratory, participated in the seven-mile Oak Hills Run in March. She had the best time, 46:36, among women in the over-30 classification. In April, she placed fifth among women competing in Medford's Pear Blossom 13-mile Mini Marathon with a time of 1:33:34.

*Dr. John A. Beare,* School of Medicine Class of 1960, director of the State Health Services Division, is the new president-elect of the Association of State and Territorial Health Officials. Association membership includes health agency administrators from each U.S. territory, state, and possession.

# Taskforce studies dangerous contaminant, dioxin

*Dr. Herbert Wendel discusses the hazards of dioxin, a dangerous contaminant found in a herbicide which has been used widely in Oregon forests.*

Western Oregonians are up in arms about the use of a herbicide which they believe endangers their health and lives.

Concern over the use of the herbicide, "2,4,5-T," has spread to the governor's office where, in March, Governor Robert Straub named a taskforce to advise him on the matter.

Named to the five-man taskforce, which includes one chemist, one toxicologist, a biologist, and a chemical engineer/administrator, was Dr. Herbert Wendel, head of the UOHSC School of Medicine's division of clinical pharmacology.

Dr. Wendel explained that 2,4,5-T is used extensively by foresters to inhibit growth of underbrush and thus promote timber. Since Oregon is one-third forest, use of the herbicide is especially widespread in this state.

Oregonians concerned about 2,4,5-T and other chemical sprays have formed a group known as Citizens Against Toxic Sprays (CATS). Recently they took their case to court and won a temporary restraining order, barring the federal government from using 2,4,5-T in the Siuslaw National Forest (along Oregon's central coast).

The citizens group is now pushing for action by the governor or legislature that would control use of the herbicide.

According to Dr. Wendel, 2,4,5-T itself is not particularly toxic; but it contains a highly dangerous contaminant, commonly called dioxin.

Dioxin is not necessary to the spray's function as a herbicide, said Dr. Wendel. Dioxin is merely an impurity formed during production of 2,4,5-T. The dioxin content of 2,4,5-T has already been reduced from between five and 30 parts per million to .01 parts per million. Dr. Wendel doubts that complete "clean up" of 2,4,5-T would be possible without prohibitive cost increase.

The Environmental Protection Agency recently studied birds and other wildlife in the Siuslaw forest and determined that dioxin was present in their bodies.

Further tests on humans in the Siuslaw area revealed small amounts of dioxin (one or two parts per trillion) in the milk of one mother. (In Texas, where 2,4,5-T is sprayed on rice fields and range lands, dioxin was found in the milk of several mothers.)

Dr. Wendel explained that dioxin is extremely toxic even in tiny amounts. He pointed out that one or two parts of dioxin per trillion may not sound like much. "But if a nursing infant drinks a liter of milk a day—365 days a year—it is quite possible that the accumulation could do real harm."

Although scientists do not know exactly how dioxin acts upon the body, its effects are well documented as a result of accidents and industrial exposures.

Among its effects are gastrointestinal disturbances, personality changes and other neurological disturbances, severe skin reactions including discoloration and sickening of the skin, loss of sense of hearing, smell, and taste, and disorders in formation of certain iron-containing pigments in the body.

Of much greater concern are the long-term toxic effects of dioxin. Long after laboratory animals have received one small, seemingly inconsequential dose of the substance, they develop liver disease, bone marrow depression, other injuries, and die.

Its effects are cumulative, Dr. Wendel said. Repeated exposure to tiny amounts of dioxin which may not, at the time, produce any symptoms may culminate in serious illness and liver failure.

"Every exposure counts in terms of possible damage, depending on further exposures," the HSC pharmacologist observed. "It is a sinister kind of drug effect."

*Dioxin's effects are cumulative. Repeated exposure to tiny amounts which may not, at the time, produce any symptoms may culminate in serious illness and liver failure.*

Available animal data also suggests that dioxin is a potential carcinogen, he added.

Dr. Wendel said that the Environmental Protection Agency is offering the Health Sciences Center a contract to perform fat biopsies (dioxin is stored in fat) on 20 to 30 Oregonians—probably mainly foresters—who have been exposed to 2,4,5-T spray.

If a sufficient number of subjects can be found who agree to undergo biopsy (a surgical procedure) and if the UOHSC accepts the contract, chemical analysis of the fat samples would be done elsewhere. (Few laboratories have the extremely sensitive equipment necessary to detect trace amounts of dioxin.)

In the meantime, the Taskforce on the Toxicity of 2,4,5-T will contine to evaluate data about the herbicide and advise Governor Straub about potential hazards.

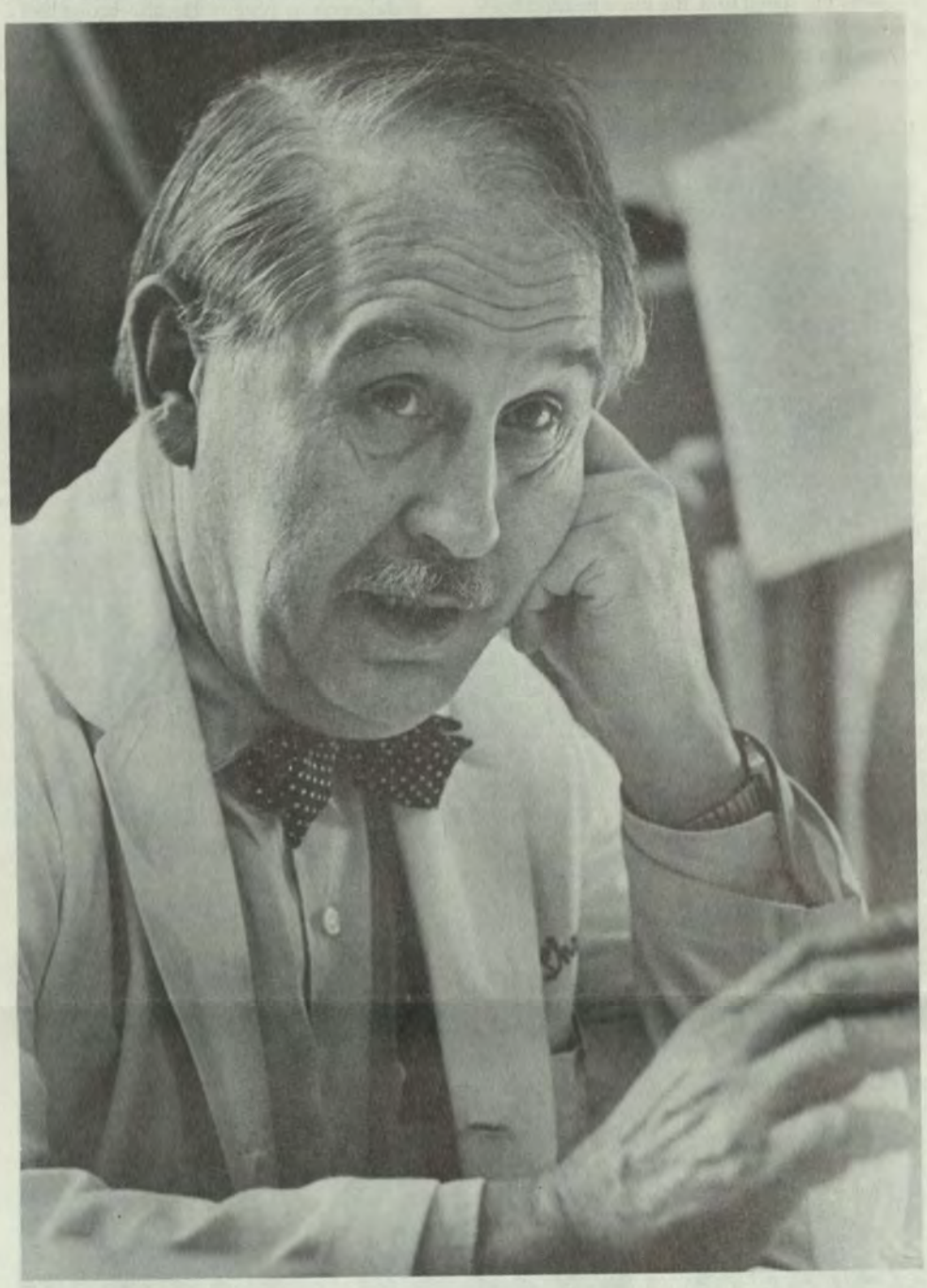
According to Dr. Wendel, all members of the Taskforce are in basic agreement about the dangers of dioxin.

"At our first meeting with the governor March 22, at least three members told him that we would like to see 2,4,5-T outlawed entirely.

"However, because a ban may not be economically feasible, the second best choice is to require licensing for use and to place severe restrictions on use in areas such as around waterways, pasture lands, and residential areas."

As a result of his meeting with the taskforce, the governor has placed 2,4,5-T on a restricted list of herbicides. It may now be used only by licensed commercial sprayers.

**DR. HERBERT WENDEL**
*head, division of clinical pharmacology*



## *VA names Marquam Hill site for hospital*

*(continued from page 1)*

The complex on Marquam Hill will include new parking facilities to accommodate patients, visitors and employees.

VA is asking Congress for $139.1 million in construction funds for the new hospital in the fiscal year beginning next October 1. The balance of funds needed to construct the new facilities has already been appropriated in earlier VA budgets.

Mr. Cleland said that if Congress approves the funds requested in the new budget, VA hopes to start construction work on the new health care facilities shortly after October 1 of this year.

The present Vancouver VA Hospital will continue to care for patients until the opening of the new Portland hospital, which is tentatively scheduled for 1982.

Although hospital operations in Vancouver will be discontinued with the advent of the new hospital, some non-bed functions will be continued at Vancouver, and will be augmented in such a way that Vancouver will become a permanent division of the new Portland hospital.

Mr. Cleland said that all of the career employees not needed for the continued Vancouver operation will be offered jobs at the new and larger Portland hospital.

The VA outpatient clinic now located in downtown Portland will continue operation as a satellite clinic to the new hospital. Mr. Cleland said, however, the VA would look into the feasibility of relocating this clinic closer to Marquam Hill to expedite the shuttling of patients and employees between the clinic and the VA hospital.

Dr. Lewis W. Bluemle, UOHSC president, expressed his appreciation for the VA endorsement of the Marquam Hill site. "This maintains a continuing close relationship between our two institutions," he said. "Now that the decision has been made, we must close ranks and see to its effective implementation."

## Units prevent scalding

About a dozen water temperature control devices are being tested in patient showers and tubs in University Hospital South.

Following this test of several brands of control units (which do not permit water to exceed 110 degrees), Physical Plant staff will select the best make and install the devices in all patient areas.

Temperature control units are now required by the Joint Commission on Accreditation of Hospitals. They are designed to prevent the scalding of a patient in cases of water pressure fluctuation or accidental movement of the hot or cold levers.

Although the new units cost only about $110 each, the total cost for installation (including new pipes and plumbing, attaching the device, and removing and replacing nearby walls) will be $565 per unit.

*To find out how handicapped and mentally retarded children are cared for in the U.S., Michio Shishido, right, of Portland's sister city, Sapporo, Japan, toured the Child Development and Rehabilitation Center in March under the direction of CCD associate professor Dr. Gerald Smith. Mr. Shishido, a college student in child rehabilitation, was a guest of Portland Mayor Neil Goldschmidt.*

*Kidney dialysis, though life-saving, is not a painless or problem-free procedure. Some patients, like the man on the left, experience cramping at the end of the procedure due to rapid change in body chemistry. On the left, William Gaynor, head technician, helps patient with leg cramps push his legs against a styrofoam block while Tanya Malcomson, R.N., applies pressure to needle insertion points.*

# End-stage renal program recognized

*University Hospital's outstanding program for patients with end-stage renal disease—or kidney failure—was recently surveyed by the federal Bureau of Health Insurance.*

University Hospital's kidney dialysis and transplant staffs had good cause for celebration last month. Their end-stage renal disease program was surveyed in late March by an accrediting team representing the federal Bureau of Health Insurance.

The visiting team gave high praise to the staffs' excellent program and thorough preparation for the site visit.

"During their exit interview, the accrediting team was extremely complimentary and said they had found no significant deficient conditions," explained John Long, associate administrator, University Hospital.

Mr. Long added that the visitors were apprised of the $40,000 renovation project to begin later this spring in the dialysis unit.

By midsummer, the unit will be completely remodeled with new mechanical, electrical, and drainage systems, plus more comforts for patients. During the next biennium, administrators hope the unit will have five new kidney dialysis machines.

The accrediting team termed these improvements "vital" to continued superior care of dialysis patients. In light of the present quality of care and the projected renovation, the Bureau of Health Insurance was expected to make a formal announcement of certification of the program this spring.

The accrediting team's visit was the end result of federal legislation passed in 1973. That year, Congress authorized the Medicare program to pay most of the costs associated with dialysis and transplant for most Americans.

*During dialysis, the patient's blood is pumped through cellophane tubing bathed in dialysis fluid. Toxic chemicals, ordinarily secreted by the kidneys, diffuse into the fluid.*

Because caseloads and costs have risen so dramatically, Congress sought to gain tighter control of the program in 1975, mandating strict regulation and certification of all end-stage renal disease programs.

Translated, "end-stage renal disease" means kidney failure. To stay alive, the patient must undergo kidney dialysis two or three times a week.

During dialysis, the patient's blood is pumped through cellophane tubing bathed in dialysis fluid. Toxic chemicals, ordinarily secreted by the kidneys, diffuse into the fluid.

Renal failure requiring dialysis may occur for a number of reasons, according to Dr. William Bennett, director of University Hospital's dialysis center.

In most cases, the filtering parts of the kidney, the glomeruli, undergo chronic destruction. This destruction may arise from many causes, only some of which have been defined. Long-standing illnesses such as hypertension, diabetes, and kidney infections may also cause progressive scarring of kidney tissue. Most of the HSC's patients (the unit usually has a caseload of about 20) suffer from one of these chronic problems.

The unit also serves several patients each month with acute renal failure resulting from severe accidents (see article in this issue on accident victim Gary Ludi), or drug overdoses and poisonings.

When dialyzing overdose victims, the staff substitutes a charcoal perfusion cartridge for the kidney machine's usual cellophane membrane. This new technique may be life-saving in cases in which drugs are not removed by conventional techniques.

University Hospital's dialysis unit is unique in Oregon. Whereas other dialysis programs aid patients who may remain on dialysis indefinitely, the UOHSC unit primarily serves patients who are awaiting kidney transplants.

"End-stage renal disease care in Oregon is very much a joint venture with close collaboration among University Hospital, local hospitals, and private doctors," Dr. Bennett pointed out.

"The patient has multiple options—hospital dialysis, training for home dialysis, or transplant—and after consultation with other health professionals, he and his physician can select the program best suited to his needs."

There is especially close cooperation between the dialysis staffs of University Hospital and the Veterans Administration Hospital, with trainees and staff rotating between the two institutions. All transplants for VA patients are performed at the HSC. In fact, all transplant surgery in Oregon is done at the Health Sciences Center.

The new federal legislation has resulted in greatly increased numbers of end-stage renal disease patients at University Hospital and other hospitals. Whereas a patient's financial resources were once an unavoidable consideration, now virtually all patients can receive this costly care ($180 per dialysis; $22,000 to $27,000 for kidney transplant) under Medicare.

"In choosing to put end-stage renal disease under a catastrophic illness program, the federal government has, in a sense, created a practical experiment in government-subsidized medicine," explained Dr. Bennett.

"Now, the basic criterion for dialysis is whether it can help the patient live a fairly normal, useful life," he said.

Many persons—including many new dialysis patients—think of dialysis and transplant as "cures" for end-stage renal disease. On the contrary, explained Dr. Bennett, they are treatments.

Kidney disease is an extremely debilitating disease which upsets the entire body. Even with dialysis, patients are beset with complications which may affect them endocrinologically, sexually, and psychologically. Some are so sick that they die.

"When new patients on dialysis don't feel as well as they expect, they may have problems coping with their illness," said Dr. Bennett. "We rely on an excellent nursing staff to identify problems. We often call in our psychiatric colleagues and social workers."

"Our goal is to help our patients lead lives which are as normal as possible in spite of their disease," observed Susan Grabast, R.N., head nurse on the dialysis unit. "Some are able to hold jobs and go to school, but many don't feel well immediately after dialysis. They are anemic and tired out due to fluid loss and changes in electrolytes.

"They are not able to engage in strenuous activity. They are on a diet restricting salt and protein. Fluid intake is restricted, and as a result, they are often thirsty," she explained.

*Kidney disease is an extremely debilitating disease which upsets the entire body. Even with dialysis, patients are beset with complications which may affect them endocrinologically, sexually, and psychologically. Some are so sick that they die.*

For these patients, a kidney transplant is a hoped for, often long-awaited, alternative to a life of dialysis.

University Hospital's kidney transplant team performs about 40 transplants a year. Theirs is one of the most active transplant programs in the nation, with about 300 transplants performed since 1959.

The UOHSC participates in the National Kidney Recipient Pool, which lists pertinent medical information about all persons in the U.S. needing kidney transplants. For example, when the HSC's transplant team receives a kidney which does not match well with transplant candidates here, the kidney may be quickly flown to another state.

Transplant patients may receive donor kidneys either from deceased persons, such as victims of accidents, strokes, or brain tumors, or from a close living relative, preferably a brother or sister.

Transplant candidates—as well as donors or donor kidneys—undergo careful testing of antigens, lymphocytes, and blood serum.

The object is to match the characteristics of the donor and recipient so closely that the body of the recipient will not reject the new, foreign kidney.

Even with these cross-match efforts, the body inevitably fights to reject the organ. To minimize this response, the patient must—for the remainder of his life—take steroids and antimetabolic drugs.

If the transplant is successful, the patient is finally free of the dialysis machine, and improvement of his general health is often dramatic.

"But there are still risks," explained Dr. John M. Barry, director of the renal transplant center. "Because of the drugs used to minimize rejection, patients are much more susceptible to infection. They may have pimples, a fat face, pot belly, and soft bones. Although the dosage of medication is gradually reduced, they must remain on these drugs for the rest of their lives."

The rate of patient survival for kidney transplants at the UOHSC is significantly higher than the national average.

For transplants with cadaver kidneys, the national survival rate is 67 per cent, while the UOHSC's rate is 82 per cent. (Figures are based on one-year survival.)

For transplants with kidneys from a live donor, the national survival rate is 85 per cent as compared with 93 per cent at the Health Sciences Center.

This difference is the result of a difference in philosophy of treatment.

Dr. Barry explained, "We don't treat acute rejection for more than five days. By acute rejection, I mean high fever and elevated blood pressure; the new kidney becomes tender, and its function deteriorates.

"If this situation doesn't reverse in five days, we remove the new kidney. Otherwise, there is a significantly increased risk that—because of the drugs to prevent rejection—the patient may die of infection."

Dr. Barry's team uses two other new procedures which increase the chance of success. First, the cadaver kidney donor is pretreated with large doses of cytoxan and steroids to make the kidney less likely to provoke rejection.

Second, the team now uses an intracellular flush solution on about 90 per cent of donor kidneys. The solution allows them to store kidneys in ice for up to 48 hours without a perfusion pump. With this method, even small community hospitals can preserve kidneys, said Dr. Barry.

Although many dialysis patients must wait long periods for a suitable donor kidney, the number of kidneys available for transplant has risen in recent years.

"With better education of the public and the work of the Oregon Donor Program," said Dr. Barry, "now, families of accident victims and other dying patients approach doctors about organ donation, asking, 'Can some good come out of this tragedy?'"

He added, "We owe a great debt to physicians and local hospitals throughout the state who have participated in the transplant program."

# Dr. Good speaks

Dr. Robert A. Good, who has received high honors for his work in immunology, oncology and infectious disease, is the 1977 Joseph B. Bilderback Lecturer at the Health Sciences Center.

He will speak on "Immunity Systems and Cancer" at 8:30 p.m. Monday, May 16, in the HSC Library Auditorium as the 15th annual lecturer in the series which honors the late Dr. Bilderback.

Since 1973, Dr. Good has been president and director of the Sloan-Kettering Institute of the Memorial Sloan-Kettering Cancer Center, New York.

Members of the medical community and public are invited to the free lecture, sponsored by the Bilderback Foundation, Portland Academy of Pediatrics, The Doernbecher Hospital Guild, and the HSC pediatric department.

# Dentists speak out on hospital dental program

*The University Hospital dental service is meeting the challenge of educating hospital administrators, physicians, and service personnel about the vital role that oral health care plays in comprehensive patient care.*

Most of us don't think of dental care as a matter of life or death. But for certain seriously ill patients, untreated oral problems can be life-threatening.

For these patients and for others whose dental problems play a role in overall health, a hospital dental service is a vital component of comprehensive health care.

In recent years as the team concept in health care has evolved, physicians and dentists at the Health Sciences Center have begun to work together to add an important dimension to patient care in University Hospital.

The hospital dental service carries its own patient load in addition to providing consultation and services to other University Hospital departments. The dental service consists of three subunits with residency training programs: pedodontics, oral surgery, and general dentistry.

Four current cases in University Hospital help illustrate the increasingly close cooperation between dentists and physicians:

1. A hospitalized three-year-old with histocytosis X, a life-threatening disease, is on medication to suppress his body's immune defenses. As a consequence, his badly infected teeth threatened his course of treatment and his life.

In the operating room at University Hospital, pedodontic residents cared for the youngster's teeth. By extending the duration of a general anesthetic, both a lymph node biopsy *and* dental care were completed by pediatrics and pedodontics, respectively.

2. The hospital dental service is overseeing the care of a patient with a cancerous oral lesion. The dental service sends this patient to radiation therapy for treatment and continues to see her regularly to check for recurrences.

3. A five-year-old girl with Werdnig-Hoffmann's disease had infected teeth which were inaccessible to routine outpatient treatment. Her disease had made previous general anesthesias hazardous.

Pediatric surgeons made dental treatment possible under general anesthesia by standing by for a tracheostomy if needed during start of the anesthetic.

4. A patient is hospitalized with a high fever of unknown origin. After running a variety of tests, his physicians call in a general dentistry resident to rule out dental infection as the cause of the fever.

Avenues of cooperation between University Hospital's dentists and physicians are especially well established in the care of renal transplant patients, hemophiliacs, cardiology patients, and persons admitted with facial fractures in emergency services.

"For a kidney transplant patient on immunosuppressant drugs, a dental abscess can be a big problem," explained Dr. Theodore Jastak, associate professor of oral surgery. "If one of these patients has an oral infection that goes untreated, a life-threatening situation can arise."

Selected transplant patients now receive an oral examination through the hospital dental service. Pedodontic residents screen all youngsters in the children's renal clinic and either provide treatment on campus or refer children to a private dentist.

Children admitted for cardiac surgery are also screened. "These are high risk patients from the standpoint that sites of repair in the heart are highly susceptible to future infection," according to Dr. Donald Porter, professor and head of the hospital's pedodontic unit. "If an oral infection is not removed, it could be transmitted through the blood to the repair site in the heart. If we find infected teeth and supporting bone, we advise physicians; and we may suggest that surgery be postponed."

Hospital dental service for adults and children with hemophilia is especially important because many private dentists do not have ready access to hematology services to manage the bleeding episodes that may accompany complex dental restorative treatment or oral surgery. During such procedures, a close cooperative effort exists between hematologists and dentists for the prevention and management of hemorrhage.

The hospital dental service handles many other cases in which potential medical complications or difficulty with patient management make treatment impractical for a private dentist.

*"If an oral infection is not removed, it could be transmitted through the blood to the repair site in the heart. If we find infected teeth and supporting bone, we advise physicians; and we may suggest that surgery be postponed."*

Close cooperation between oral surgeons and otolaryngologists in the emergency care of facial fractures (such as broken jaws) resulted in recent establishment of a shared rotation in the emergency room. Now otolaryngology residents and oral surgery residents are on call alternately.

"Both groups treat the same fractures, although their techniques may vary slightly due to a difference in philosophy and background," said Dr. Jastak. He added that the two groups consult freely on complicated cases.

The services performed by the three units (oral surgery, pedodontics, and general dentistry) of the hospital dental service are varied:

In addition to facial fracture surgery, oral surgeons at the HSC perform orthognathic surgery, in which facial bones are moved to correct oral-facial deformities.

They also do implant surgery; operate on patients with benign tumors in the mouth and on the jaws; perform bone and skin grafting to allow certain patients to wear dentures or other prostheses; and treat patients with temporomandibular joint diseases.

Pedodontic residents treat youngsters either as inpatients in a small dental clinic in Doernbecher Hospital, or as outpatients in the second floor dental service clinic of the Outpatient Clinic. Residents screen almost every child admitted to the hospital.

The newest residency training program in the hospital dental service is general dentistry, headed by Dr. James Bennett, professor of dentistry.

"Probably every ward in University Hospital has patients with routine dental problems which should be assessed," said Dr. Bennett. "Our residents can provide consultation and primary care for such problems when requested."

Dr. Bennett is working with the Family Practice Clinic to establish a rotation for general dentistry residents.

Drs. Bennett, Porter, and Jastak pointed out that the major emphasis of the hospital dentistry program is on providing good patient care and a sound educational experience for residents.

They commented that residents cannot function more effectively and cannot schedule more patients because the dental service does not have adequate space.

There is a waiting list for appointments in the dental service's present cramped quarters in the OPC, and many patients must be referred elsewhere.

Because they are unable to serve all of their patients in the small OPC clinic, oral surgery residents treat many of their outpatient cases in the School of Dentistry's oral surgery department. This is an inconvenience for the patient.

*When a child's infected teeth jeopardize overall health and well-being, University Hospital dentists and physicians collaborate in care. Above, Dr. Michael Bierman, left, pedodontic resident; Jackie Thoreson, dental assistant; and Dr. James Lace, pediatric resident, discuss a youngster's progress.*

Although they see much room for improvement in hospital dental services and physician-dentist communication at the Health Sciences Center, Drs. Porter, Bennett, and Jastak are enthusiastic about the impact their programs are having on young dentists and physicians.

"Medical and dental residents are learning to appreciate each other's expertise and role in comprehensive patient care," said Dr. Porter. "More and more often, they ask each other to go on rounds to show what each looks for. The result is that both physicians and dentists are learning to look at patients more knowledgeably.

"The exchange that develops through sharing serves the educational interests of both groups and contributes to a higher standard of patient care."

*"I do not intend to diminish the pressure to establish high quality oral health care programs within our University Hospital. They belong there as much as other disciplines, and it is time that we stopped the anatomic fragmentation of patients into distinct diseases."*

According to Dr. Lewis Terkla, dean of the School of Dentistry, the existing programs have taken 11 years of difficult negotiation just to become established at a minimal and marginal level.

"Not only has it been extremely challenging to educate hospital administrators, physicians, and service personnel about the important and necessary role that oral health care must assume in the milieu of comprehensive patient health care, but also the assignment of sufficient space to perform the essential services has been a severe roadblock in meeting accreditation requirements."

The programs were site visited for accreditation January 19, 1977, and Dr. Terkla commented, "I expect an unfavorable response from the visiting committee.

"I do not intend to diminish the pressure to establish high quality oral health care programs within our University Hospital. They belong there as much as other disciplines, and it is time that we stopped the anatomic fragmentation of patients into distinct diseases.

"Progress is being made, even if by millimeters, and I am delighted with the recent cooperation of Drs. Bluemle, DeWeese, and Kassebaum in devoting attention to the dental school's involvement in the care of hospitalized patients. Dr. Bill Krippaehne has helped us immensely throughout our effort and understands in depth the contributions that dentistry can make in the Hospital.

"As health sciences centers go, we are underdeveloped in the area of hospital dentistry, but I believe that we have entered an era of rapid and enlightened change that will benefit patients as well as the entire health care team in learning to share the responsibilities of making sick people well and teaching them how to stay out of our hospitals. Eventually, we hope that the logistics of locating space and increasing the number of orofacial trauma patients who seek our services will be surmounted."

## Poetess identified

In the last issue of *HSC News*, a poem entitled "Marquam Hill" was printed. The poem, found by University Hospital X-ray technicians, was written by Clara Hoff, about whom no further information was known.

Katherine Sears, former director of nurses at the old Multnomah County Hospital (1938-48), called *HSC News* with the solution to the mystery:

Mrs. Hoff was a nurse and poetess. She was on the nursing staff at the old county hospital and wrote numerous poems about the Hill and about medicine. Among her poems are works dealing with death, blood transfusions, and limited time.

Books of her poems, *Fallow Fields* and *Gate on the Hillside*, were published in 1945 and 1950, respectively.

## *HSC News* honored

*Health Sciences Center News* has been selected as one of the nation's top 20 tabloid newspapers published by educational institutions.

In naming the top 20 tabloids, the Council for the Advancement and Support of Education (CASE), in Washington, D.C., asked editors of the 20 to send 600 copies of current issues for inclusion in an upcoming Creative Tabloid Design work-kit.

Other institutions whose newspapers were selected as among the top 20 include Harvard, Yale, Princeton, Duke, Johns Hopkins, Brown, and UCLA.

Last year, CASE awarded *HSC News* two certificates of recognition, honoring excellence in tabloid newspaper publishing programs and photography.

# First national chromosome registry funded at Center

*The nation's first central chromosome registry will collect information on chromosome aberrations causing birth defects or mental retardation.*

A national chromosome registry, the first of its kind in the nation, is in operation at the Health Sciences Center, funded by a three-year grant of more than $750,000 from the National Institute of Child Health and Human Development.

Registry director Dr. Gerald Prescott, HSC associate professor of medical genetics and perinatal medicine, said the registry will serve as a central collection point for information on aberrations (chromosome errors), which can cause birth defects or mental retardation, or both.

"Since aberrations are fairly rare, it's important to have a national collection point for information on them. Also, with all the breakthroughs in cytogenetics (the study of chromosomes) more aberrations are being discovered. This kind of effort to keep tabs on these findings is needed for improved patient care and medical research," he said.

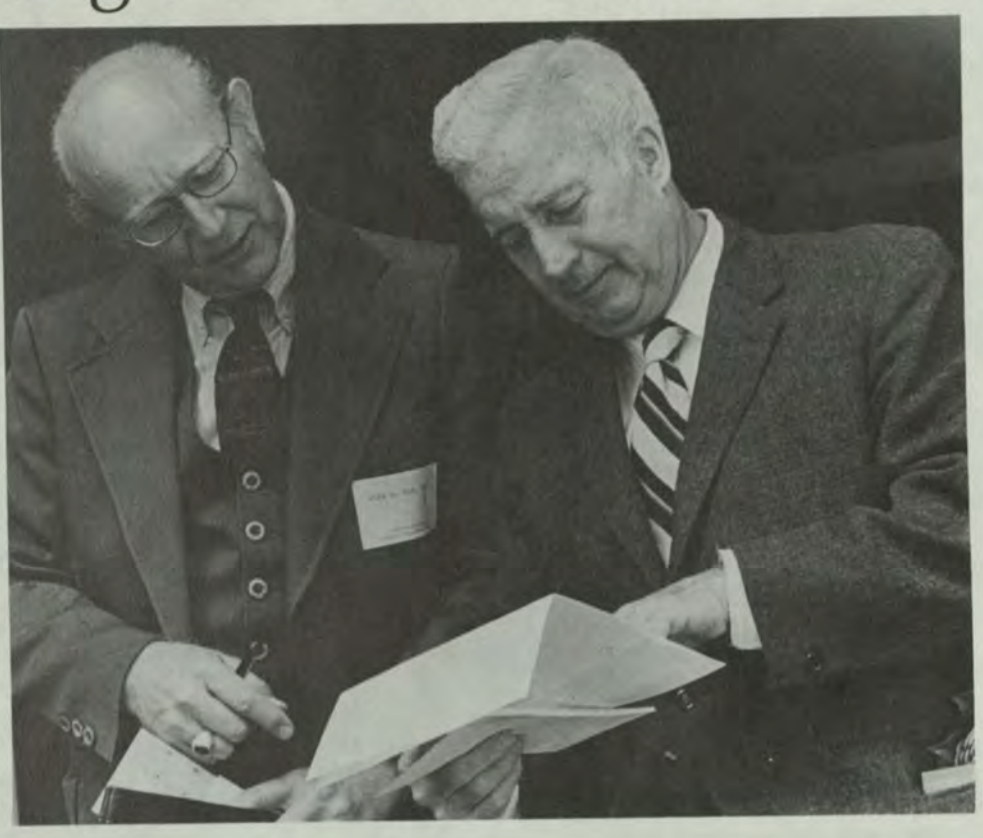
The registry will catalogue and computerize the results of chromosome studies done on patients at the Health Sciences Center's Crippled Children's Division and five other regional registry centers across the nation.

The other centers include the Yale University Medical School, New Haven, Connecticut; University of Tennessee Medical School, Memphis; University of Colorado Medical Center, Denver; Indiana University Medical School, Indianapolis; and Albany Medical College, Albany, N.Y.

Computer work for the registry can help establish patterns of problems caused by aberrations. The registry will also be useful in genetic counseling with those couples who have high risk of having children with chromosome problems.

There are about 6,000 patients now listed in the registry. By late 1977 about 15,000 are expected to be listed.

# *Scientific meeting draws School of Medicine alumni*



About 500 physicians from Oregon and throughout the country attended the 62nd annual scientific meeting of the Alumni Association of the School of Medicine at the UOHSC in April.

At the meeting, which was held in conjunction with the Sommer Memorial Lectures, Dr. William Fisher, Class of 1949, associate professor of family practice at the Health Sciences Center, was elected alumni president.

Other officers elected were Portlanders Drs. J. Gordon Grout, vice president; Richard Hodgson, treasurer; Robert Gray, secretary.

*Talking over old times and current work were (large photo) Dr. Otto Emig, Class of '44, now a clinical faculty member at the University of California, San Francisco, and Dr. David W. James, HSC clinical associate professor of obstetrics and gynecology. Dr. James was once one of Dr. Emig's professors. Far left, top photo: Two members of the Sommer Memorial Lecture Committee, Dr. Joseph Roberts, left, Class of '32, and Dr. John Raaf, second from left, chat with alumnus Dr. Gordon Prewitt, Class of 1942, and Sommer lecturer Dr. Paul Ebert, far right, chairman of the department of surgery, University of California Medical Center, San Francisco. Far left, bottom photo: Two School of Medicine alumni meet for a coffee break between lectures.*

# Dotter attends symposium devoted to procedure he developed

*Dr. Charles Dotter was a guest of honor recently in Nuremberg, Germany, at a symposium devoted to transluminal angioplasty.*

Transluminal angioplasty, a catheter procedure, has proved to be an effective therapy for many victims of arteriosclerosis.

The procedure was developed by Dr. Charles Dotter, chairman of the UOHSC department of radiologic diagnosis.

In March, Dr. Dotter was invited as guest of honor at a symposium devoted to his procedure held in Nuremberg, Germany. The program consisted of reports and discussions by physicians experienced in transluminal angioplasty.

Although the technique has yet to gain wide acceptance in the United States, it is more commonly used in Europe, especially in Germany, Switzerland and Holland.

Since 1964, Dr. Dotter and his associates have performed nearly 450 transluminal angioplasties on patients in University Hospital. Dr. E. Zeitler, a West German radiologist, has the largest series, over 900 cases.

Some physicians consider the technique a significant addition to the treatment of arterial disease. In fact, many of Dr. Dotter's patients are physicians. Others, especially in this country, ignore the procedure or openly oppose it.

The procedure is used to treat patients with arteriosclerosis, a disease which narrows the arteries, restricting or completely blocking the flow of blood through them.

Impaired circulation to the legs usually first appears as pain during walking. In time, the condition worsens, and leg ulcers and gangrene may develop as the stricken limb is deprived of nourishment.

Surgical treatment consists either of endarterectomy—a cleaning out of the arteries—or bypassing obstructed areas with a grafted vein or synthetic fabric tube. Drug therapy rarely works.

Dr. Dotter has discovered that narrowed arteries can be reopened by dilating them from within. The dilation repair usually lasts, but can be repeated if there is a recurrence.

The procedure—done under local anesthesia—is simple and fast. The radiologist uses a needle to insert a catheter into the artery and pass a long, flexible guide wire through the narrowed part. Over this he then pushes through one or more catheters of increasing diameter until he sees on the fluoroscopic monitor that the diseased portion of the vessel has been opened satisfactorily.

Dr. Dotter explained, "Pull out a nail and you're left with a hole, although nothing but the nail came out. The principle here is similar, only we use a catheter instead of a nail.

"Patients are on their feet in a few hours," he continued, "and home in a day or two. By contrast, surgery can require a week or 10 days in the hospital."

Approximately 75 per cent of the time, transluminal angioplasty improves peripheral circulation. One out of five successfully treated patients needs to have a second dilation eventually.

Recently, transluminal dilation was successfully done on Paul Batty, a retired U.S. Army civilian whose Kettering, Ohio, physician referred him to Dr. Dotter.

Mr. Batty has diabetes, which is often associated with arteriosclerosis in the legs.

"Seven years ago, they had to amputate my left leg because of arteriosclerosis," explained Mr. Batty. "My right leg was developing the same problem. My toes were already becoming gangrenous. I felt a lot of discomfort. They (Ohio vascular surgeons) had already reamed out the artery once, and that can't be done again."

Mr. Batty lay fully awake on the X-ray table while Dr. Dotter did the angioplasty. "As the procedure was completed, I felt an immediate change in my leg and foot. The discomfort stopped almost immediately."

Health Sciences Center physicians are working with Dr. Dotter to determine the limits of applicability of this form of treatment, which is an alternative to surgery in selected cases.

# *New research techniques prove truth of Dr. Edwin Osgood's hypothesis*

In 1957 the late Dr. Edwin Osgood, then head of HSC experimental medicine and hematology, postulated why the number of white blood cells increases in chronic granulocytic leukemia.

Now, 20 years later and eight years after his death, the hypothesis has been proven true.

Research in 1976 and 1977 by Dr. Hal Broxmeyer of New York's Sloan-Kettering Cancer Institute proved Dr. Osgood correct.

Dr. Grover Bagby, assistant professor of medicine, confirmed Dr. Broxmeyer's findings in mid-February, 1977, after research in the HSC Osgood Leukemia Center laboratory and at the Portland Veterans Administration Hospital.

"The hypothesis took so long to prove because Dr. Osgood didn't have the bone marrow culture technique we have today," Dr. Bagby explained.

The technique of semi-solid bone marrow culture was discovered and described independently in 1966 by research teams in Australia and Israel.

But, Dr. Bagby said, it was not until the early 1970s that the technique was perfected for use in human experiments.

Twenty years ago, Dr. Osgood hypothesized that the number of neutrophils, a kind of white blood cell, increases in chronic granulocytic leukemia because an inhibitory factor is lacking.

In the normal body this inhibitory factor slows down the production of neutrophils, but if the factor is absent the production of neutrophils proceeds at a more rapid pace.

Leukemia is a disease of the blood-forming tissue, characterized by an abnormal and persistent increase in the number of white blood cells.

*Twenty years ago, Dr. Edwin Osgood hypothesized that the number of neutrophils, a kind of white blood cell, increases in chronic granulocytic leukemia because an inhibitory factor is lacking. New research techniques prove him correct.*

Chronic granulocytic leukemia is caused by an abnormal accumulation of the granulocytic elements (neutrophils) of the blood. It can be treated but it is progressive and ultimately fatal.

Slightly more prevalent in males, the disease strikes all ages, but chiefly those who are 20 to 50.

An eventual benefit of the confirmation of Dr. Osgood's postulation could be a new way to treat the over-production of white blood cells in chronic granulocytic leukemia, according to Dr. Bagby.

"It's conceivable," said Dr. Bagby, "that we might eventually isolate the inhibiting factor and inject it into the blood of those with the disease.

"Something similar was done for patients with hemophilia who are now managed with clotting factor replacement therapy. But it will take much more research to see if inhibiting factor replacement therapy would even be possible in leukemia."

# Hospital improves communications with community

*Dr. Donald Kassebaum tells how University Hospital is solving its communication problem. New procedures at the Hospital and questionnaires for physician feedback are important elements in the program.*

University Hospital administrators are working hard to improve channels of communication with physicians in the community.

Several months ago, Dr. Donald Kassebaum, vice president for hospital affairs, began sending a short, four-item questionnaire to physicians in the community.

The folded-card questionnaire, which is sent as soon as the patient is discharged, contains the referring physician's and patient's names and asks:

—Was your patient satisfied with his treatment at University Hospitals?

—Did you receive a call from one of our physicians at the time your patient was discharged?

—Have you received the patient's discharge summary?

—Did you encounter any difficulty or delay in referring the patient to University Hospitals?

—Comments:

Dr. Kassebaum estimates that 90 per cent of the physicians' responses indicate no problems. In fact, many are complimentary. For example: "Thanks for asking." "This card is a good idea." "Very satisfied with the excellent care received." "Good cooperation as usual."

Dr. Kassebaum makes certain that all problems and adverse comments receive immediate attention.

"These cards are addressed directly to me, not to someone down the road," he said. "I see every one of them. When I find adverse comments, I photocopy the card, look up the name of the doctor here who cared for that patient, and send him the referring physician's comments. Barbara Hiatt (assistant administrator of hospitals and clinics) deals with any comments about medical correspondence services."

Dr. Kassebaum's campaign to improve communications with the community has resulted in new procedures and guidelines for University Hospital staff.

He explained, "About a year and a half ago, Dean (Robert) Stone and I began to visit county medical societies in the state. We found that one of the most common criticisms leveled by community physicians about the University Hospital and clinics related to communication about transferring patients to the Hospital, getting them an appointment in the clinic, and obtaining information on the results of the care received here.

"Some doctors felt they got the run around when inquiring about admission to the Hospital and clinics. If they were successful in getting a patient into the system, it might take forever to find out what went on. They didn't get called by the doctors here, and they didn't receive discharge summaries or letters until long after the fact."

Dr. Kassebaum continued, "We responded to these criticisms in several ways. We found that our system of access to the Hospital and clinics was fragmented, with different systems for different departments.

"So we took advantage of the new CORE system (Central Operation for REceivables) to consolidate hospital admitting in one area on the ninth floor of University Hospital South. Now all calls about hospital admissions are channeled to this area on one number, 225-8136," the hospital director explained.

"Our goal is to eliminate the shopping around that doctors have had to do in order to get patients admitted," he said.

Under the old system, the referring physician had to speak directly with a faculty member or senior resident in order to admit a patient. This procedure often resulted in frustrating delays.

Now Hospital administrators have established guidelines for many departments so that the admitting nurse coordinator can accept the patient directly. Procedures for clinic admissions have also been simplified.

*"I decided over a year ago that the only way I was going to learn if we were successful in rectifying our communication problem was to ask doctors themselves."*

Another major problem under the old system was inadequate communication with the referring physician about the patient's treatment at University Hospital and recommendations on follow-up care.

New procedures require that university physicians contact the referring physician orally and in writing at a number of points during and after the patient's treatment at University Hospital.

Often, university physicians call the referring physician to verify their findings as soon as the patient is admitted.

At the time of discharge, the resident or staff physician usually calls the community physician and discusses findings and treatments.

In addition, an Order for Discharge form—containing information on findings, treatment, and follow-up instructions for the patient—is sent immediately to the referring physician.

A Discharge Summary, a formally transcribed letter listing details of the hospitalization, should be sent to the community physician within seven to 10 days. However, there are still delays in this procedure (now requiring about two weeks) which need to be eliminated.

Dr. Kassebaum's physician questionnaire cards provide the final communications link.

"I decided over a year ago that the only way I was going to learn if we were successful in rectifying our communication problem was to ask doctors themselves," he commented.

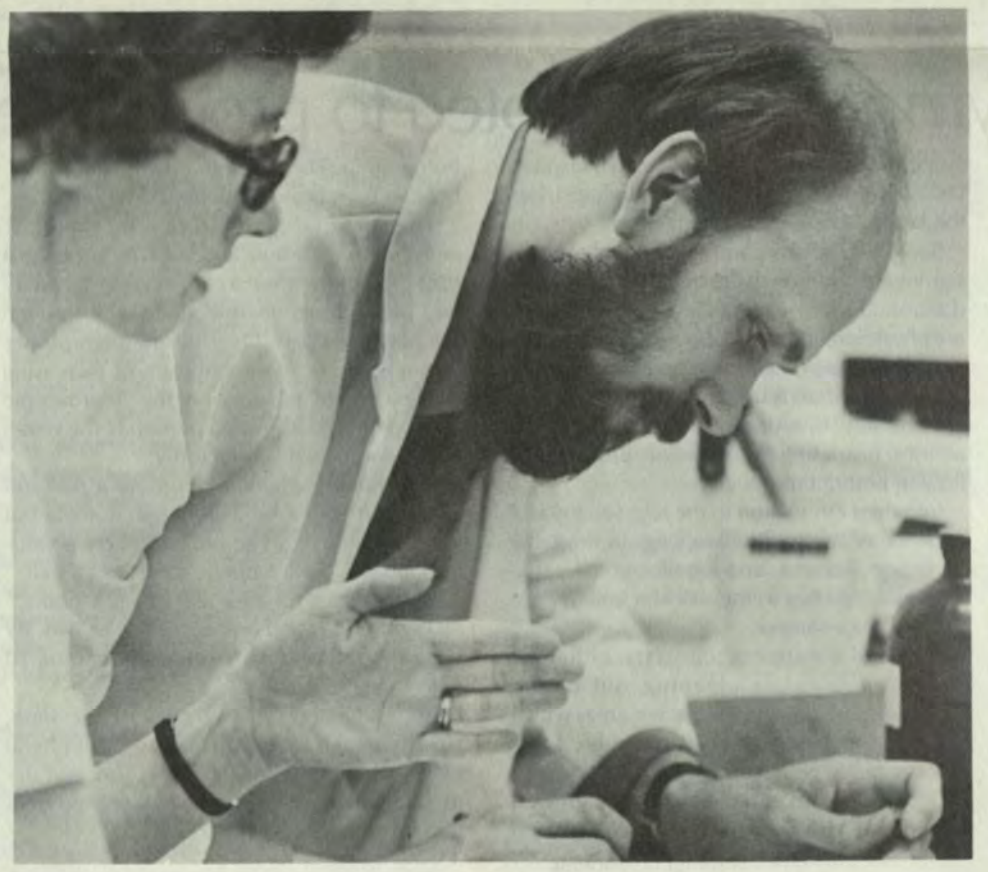
"The results have turned out to be very interesting. For the first time, community physicians have a guaranteed chance to express their feelings about the experience which they and their patients have had with University Hospital.

"Sometimes, referring physicians take advantage of the cards to ask for additional information or the rationale for decisions or treatment. These requests are sent to the attending faculty physician for answering."

The attitudes of many Oregon physicians are reflected in the comments of one Pendleton physician who returned his card with a long letter which began, "I was delighted to receive from you a postcard for evaluation of the hospital care given this infant. . . . (An explanation of strong and weak points of the referral system and hospitalization followed.)

The writer concluded, "I hope these comments will be of help to you. It is of vital interest to me that you maintain the highest ideals in terms of quality of care. This would include patient (and parent) satisfaction and acceptability. It is a matter of significant security to those of us in remote areas around the state to know that a patient who is referred to the University receives the best of care."

# Clinical pathology staff play vital role in diagnosis, care



*Large photo above, right, Sonya Dobberfuhl discusses hemoglobin electrophoresis results with Dr. Norman Kruse, resident in clinical pathology. Top photo, this column, Mary Carr examines culture. Other employees in photos below are Ruby Carter, Gail Plauche, and Laurie Mosey.*

Doing two million tests a year and operating 24 hours a day makes the HSC Clinical Laboratory a busy place.

The 172 laboratory employees do everything from testing blood, urine, and spinal fluid to isolating micro-organisms and operating brain scan equipment.

Even what seem like minor tests can take as many as eight employees, according to Dr. Victor Marquardt, assistant director of Clinical Laboratory services. For example, a blood test can involve:

—someone to check the request form.
—a person to draw the blood.
—someone to transport it.
—an employee to receive the specimen.
—a person to test it.
—someone to double-check it for accuracy.
—someone to record test data.
—an employee to put test results in the patient's chart.

While all laboratory work is important, some is especially vital, such as tests for patients during surgery or for those being treated in intensive care units.

The laboratory is "one of the most up-to-date as far as analytical equipment is concerned," according to Dr. Tyra Hutchens, chairman of the department of clinical pathology.

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