



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.

Sea creatures yield clues about hallucinogen

When a person takes the drug LSD, why are characteristic hallucinations experienced?

Research studies of cellular reactions to LSD are beginning to unlock the mystery of why this drug causes hallucinations.

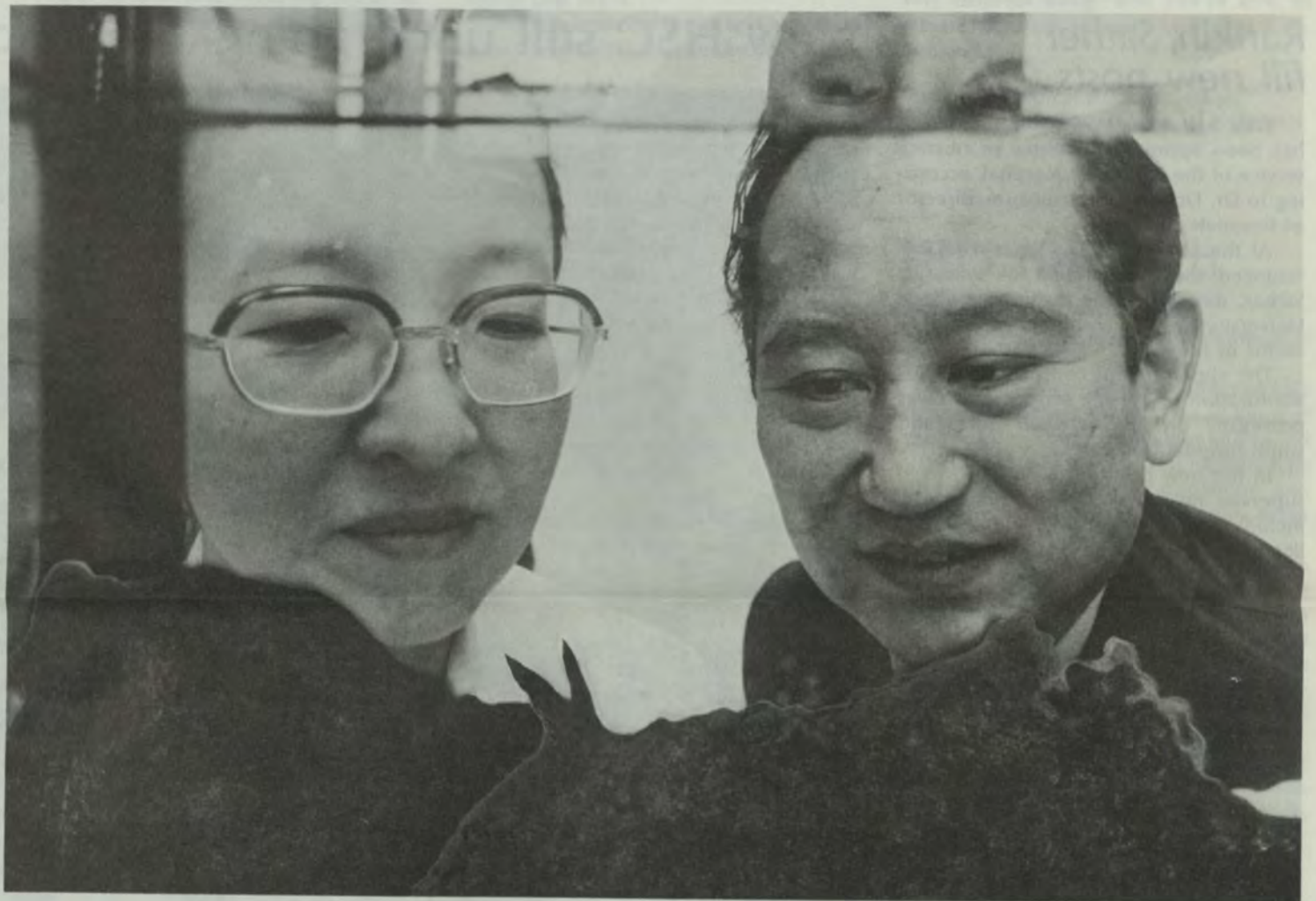
Scientists involved in the project are Dr. Makoto Sato, associate professor of neurosurgery, director of the neuroscience laboratory, and Dr. Hideko Yai, visiting associate professor of neurosurgery (research).

Using *Aplysia Californica* (Pulmonary Mollusc), a sea animal about the size of two human fists, Dr. Sato and his associates have been analyzing the effects of various drugs on different nerve cells which have been individually identified physiologically and pharmacologically.

The *Aplysia* is used since it has large nerve cells, approximately seven times larger than those found in humans, and easily penetrated by pairs of microelectrodes.

"*Aplysia* nerve cells provide an alternative mode to the human brain because they include almost all kinds of postsynaptic connections."

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Dr. Yai, left and Dr. Sato observe a pair of aplysia in an aquarium. These sea creatures may help unlock LSD's mysteries.

Center weathers the storm, looks toward future

The Health Sciences Center had a birthday last month. Although the HSC is young compared to its three major components, the Schools of Medicine, Nursing, and Dentistry, it has been through quite a bit during its first year.

At a first anniversary celebration November 20 in the Library auditorium, Dr. Lewis W. Bluemle, who has been president of the Center for one year, spoke candidly about what has happened so far.

"In addition to adjusting to the new ideas and styles of a new administration, we had to cope with at least three unusual threats to campus equilibrium: the threat of strike, the threat of losing our hospital accreditation and more recently the threat of losing our malpractice liability protection," said Dr. Bluemle.

"In each case, I am proud to say a crisis was averted by cooperation in a spirit of constructive compromise."

The president, a former New Yorker, added, "There have been times during the last year, I must admit, when I worried a lot and didn't sleep very well."

"But whenever I got to feeling too depressed, I simply reminded myself that I no longer work for a state which is concerned about going bankrupt."

Dr. Bluemle discussed the outstanding accomplishments made during the Center's first year. A record number of students were graduated, and on the average,

they ranked significantly higher than those from other institutions on national and state board examinations, said Dr. Bluemle.

He pointed out that average educational costs at the HSC are well below the national level.

The president continued, "Our research efforts, while modest compared to some institutions, have been productive on the whole and exemplary in certain areas."

"With regard to clinical care, our attention has been focused on improving the organization and management of patient services, where we all know much remains to be done."

"Nevertheless, we are building from a solid base of diagnostic talent and therapeutic capability."

"It would appear to me that one of our primary objectives must be to render patient care in a setting and style which are comparable to the best in the country."

Dr. Bluemle applauded the work of the new Advisory Council and announced the creation of the Health Sciences Center Foundation.

"This new Foundation, the membership of which will be made public shortly, is a natural successor of the Medical

School Advancement Fund. Its primary purpose is to generate dollars from various sources in support of our general programs and special projects," said Dr. Bluemle.

He continued, "I can think of one special project which could keep us all busy for several years. This is the development of some modern clinical facilities."

"It would appear to me that one of our primary objectives must be to render patient care in a setting and a style, if you will, which are comparable to the best in the country."

"Hard-bench, long-wait' clinics are no longer acceptable by either social or educational standards. Nor is it sound in my view to perpetuate the use of antiquated service facilities and methodologies when with a reasonable capital investment their cost effectiveness can be markedly improved."

"Accordingly, we are now developing a long-range strategy to improve many areas of the University Hospitals and Clinics."

Dr. Bluemle's discussion of the Center's finances included the following comments:

- On the average, every citizen of our state now contributes about \$12 to our support.
- With a better billing system and rea-

sonable growth of our clinical activities, the percentage of our total income which is made up of patient fees should continue to increase. "Indeed it must, if we wish to finance more adequately a series of improvements in patient care."

- Salaries and wages constitute our greatest cost.

- "The amount provided for equipment is simply inadequate. In the absence of better funding for equipment, we must at least for the present, figure out some imaginative ways to skin this cat, perhaps with the help of our new Foundation."

The president added, "We have at least two other important decisions to make about financing shortly. The first is whether to reapply for continued funding of the School of Medicine through the capitation grant."

"Without a definitive law spelling out new eligibility requirements, we cannot decide this now."

"However, if these new requirements are likely to cost us more money than we may receive, or if in our judgment they will adversely affect the quality of our educational programs, my inclination is to plan for an alternative strategy which permits us to get along without this mercurial federal support."

"Secondly, we must come to grips with a plan for handling professional fees which

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Center will have revolutionary scanner

A new computerized X-ray body scanning system which experts believe is destined to revolutionize the field of radiology worldwide, will soon be in operation at the Health Sciences Center.

University Hospital is the third Oregon hospital to receive approval from the Oregon Health Commission to acquire the new computerized axial tomographic scanner (CAT).

The CAT scanner is expected to cut costs by reducing hospital stays and eliminating the need for much exploratory surgery.

Moreover, the process is noninvasive, causing no discomfort to the patient and exposing him to no more radiation than conventional X rays.

The procedure is simple. The patient reclines on an adjustable couch which extends through a circular opening in the scanner.

In about 20 seconds, the machine ro-

tates around the chest and produces a highly-defined, computer-generated picture of a slice through the area which physicians wish to study.

In a manner of speaking, the physician can hinge open a patient's body at any point and study bones, organs and tissue formations at that location.

In a manner of speaking, the physician can hinge open a patient's body at any point and study bones, organs, and tissue formations at that location. The resulting pictures show details of the human body, previously impossible to detect.

Although conventional X rays are still valuable in showing bones and objects such as gallstones inside the body, they provide only shadowy pictures at best of soft tissues, usually superimposing bones

and organs in a confusing mass.

But the new body scanner, which is said to be 10 times more sensitive to differences in densities, can differentiate between diseased and healthy tissue (making early detection of cancer possible), and can detect tumors, abnormal cavities, blood clots, and enlarged organs.

The body scanner beams a fan of X rays through the patient and rotates 10 degrees and beams again until 180 degrees have been covered.

This detects tens of thousands of absorption rates. This information is fed into a computer which has been programmed "to know" the absorption capacities of different tissues.

From this, the computer builds a picture of the organs and other matter, and the results are presented as pictures on a television monitor screen. Each picture can also be photographed or stored on magnetic tape for later review.

The cost for a scan, when it does become available for patients, will probably be between \$200 and \$300.

The HSC will lease the scanner for about \$109,000 annually over the next six years.

At the end of the six-year lease, which is renewable annually, the Center can own the unit for the purchase price of \$1.

UOHSC officials say they expect the scanner to be installed and ready for use sometime in 1976. It will cost \$35,400 to renovate existing space in University Hospital South for installation of the new equipment.

The scanner will be under the overall supervision of Dr. Charles Dotter, chairman of the department of diagnostic radiology.

Scanner operation will be under the direct medical supervision of Dr. Charles Kerber, the only certified neuroradiologist in the state.

Rankin, Sather fill new posts

Gale S. Rankin, HSC nurse since 1947, has been appointed director of nursing service of the University Hospital, according to Dr. Donald G. Kassebaum, director of hospitals and clinics.

At the same time, Dr. Kassebaum announced the appointment of Sylvia H. Sather, director of the nursing service at University Hospital South, as associate director of nursing.

The appointments consolidate the administration of nursing service which was previously divided between north and south hospital units.

In her new position, Mrs. Rankin will supervise nearly 700 hospital employees, including 355 registered nurses, 165 licensed practical nurses and other supportive staff.

Mrs. Rankin has been director of nursing service, University Hospital North, since 1955. Between 1947 and 1955 she was, successively, a staff nurse, head nurse and assistant director of nursing. She is a graduate of the University of Oregon School of Nursing.

Miss Sather joined the UOHSC in 1962 as an operating room nurse. She became operating room supervisor in 1965, and in 1970 was named assistant director of nursing service. In 1973 she was appointed director of nursing service. In 1973 she was appointed director of nursing service of University Hospital South.

She received her diploma from St. Luke's Hospital, Fargo, North Dakota, and was awarded a nursing degree from the University of Oregon School of Nursing in 1966.

New HSC still undergoing metamorphosis

(continued from page 1)

is fair, fully accountable, workable in the sense of recognizing on-going obligations to base salary support, and finally one which removes dollar disincentives for admitting patients on campus."

Dr. Bluemle directed special praise toward Dr. Louis Terkla, dean of the School of Dentistry, and to the Dental Alumni Organization for its strong support of the school.

He also commended the efforts of Acting Dean Ruth Wiens, of the School of Nursing; Dr. Victor Menashe, director of the Crippled Children's Division; and Dr. Robert Stone, new dean of the School of Medicine.

Dr. Bluemle concluded by saying, "All in all I think we have a great team with a healthy mix of old, new and metamorphosed people in both administration and faculty."

He added that he is "proud and happy" to be associated with the new University of Oregon Health Sciences Center.

Several hundred staff members and guests gathered for a reception following the founding day anniversary commemoration. At the reception, in the top photo on the right, Dr. Lewis Bluemle speaks with Dr. William Montagna, right, professor of experimental biology and dermatology and director of the Oregon Regional Primate Center, and George Layman, center, president of the State Board of Higher Education. In his anniversary address, Mr. Layman discussed "Higher Education: The Year in Review."



Photos by Tim Marsh

HEALTH SCIENCES CENTER NEWS

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Study focuses on dangerous protein inhibitor

The Health Sciences Center is one of ten medical centers in the U.S. which has been selected for the first national cooperative study of hemophiliacs.

The National Heart and Lung Institute has awarded the Center a three-year grant of \$166,832 for the study which will focus on patients who develop a resistance to the transfused factor VIII concentrates essential for the control of hemophilia.

Conducting the study will be the division of hematology's Coagulation Research Laboratory and the Crippled Children's Division's Hemophilia Clinic.

Co-directors of the project are Drs. Scott Goodnight, Jr., assistant professor of medicine, and Everett Lovrien, associate professor of pediatrics and medical genetics.

Dr. Goodnight explained that factor VIII, a protein which helps the blood coagulate, is deficient in patients with hemophilia.

Without sufficient factor VIII, spontaneous and persistent bleeding may occur, leading to joint deformities, other

disabilities and possibly death.

Dr. Goodnight estimates that there are about 200 known cases of hemophilia in Oregon. About five per cent of hemophilic patients receiving factor VIII concentrates will develop an antibody, called an inhibitor, which destroys the factor VIII contained in the concentrates often making them completely ineffective. In those cases, other treatments must be used to control the bleeding.

The study will examine the characteristics of those patients who develop a factor VIII inhibitor.

"If we can learn more about the patient and the inhibitor, we might be able to provide better treatment or reduce the incidence of this disastrous complication," he said.

The national network of ten health institutions will gather data on more than 1,500 hemophilic patients, giving them periodic physical examinations, lab tests, and a check-out for inhibitor development.

Dr. Goodnight will soon have a report

published in the *Journal of Pediatrics* about a young patient who had an inhibitor and was successfully treated by a new treatment method, still in early stages of use.

He is a member of the Medical Advisory Board of the Oregon Chapter of the National Hemophilia Foundation.

VAH, HSC studied

A three-man team from the National Academy of Sciences (NAS) was on campus early in December to assess the potential for shared services between the Veterans Administration Hospital and the Health Sciences Center.

The assessment is part of a nationwide study of the VA system which Congress has asked the NAS to perform.

Two other groups from the National Academy will be at the VA in the coming weeks to study the patient care process and dental services.

Freshman recalls summer bicycle odyssey

When Becky Bascom, first year medical student from Eugene, was a child, she dreamed of climbing Mount Everest and bicycling across America. Last summer, one of her dreams became a reality.

Becky, who was graduated from Radcliffe College last June, was one of 12 college students chosen for a *Great American Bike Tour*, sponsored by J. C. Penney Company and the Celanese Fibers Marketing Company.

Becky was selected for the 66-day, 3,950-mile trip from New York to San Francisco partly on the basis of previous long-distance cycling experience.

Prior to the trip last summer, Becky's longest bike tour had been a 300-mile trip in France two years ago during her junior year abroad.

According to a recent article about Becky by Kathie Durbin of the *Eugene Register-Guard*, the medicine freshman was a little skeptical the first time she met the people who were to be her traveling companions.

"I couldn't believe they'd make it," she was quoted in the article. "They didn't

look at all athletic. I wasn't even so sure I'd make it."

The bike caravan, which was accompanied by a large van carrying equipment and food, cut a horizontal path across the middle of the country after setting out from Central Park in New York City and then heading west from Washington, D.C.

"When we left New York and took U.S. 1 through New Jersey, the traffic was horrendous," Becky recalled. "The soot, the dust—I was just numb."

"Some of our hardest riding was in those first few days, fighting traffic. We got into Baltimore about 5 p.m.—the peak rush hour. The heat was radiating off the pavement, just coming up at you. And we were on roads with no provisions for bicycles."

"The second hardest stretch was through the Alleghenies," said Becky. "The elevation gain wasn't great overall but we'd go straight down one mountain and then straight up another one."

"We hit our first lightning storm in St. Louis."

Becky recalled the beauty of the Rocky

Mountains, but added that it wasn't until Utah that the group began to feel they were going to make it. Only one member did not fare well on the journey — due to inadequate diet and insufficient sleep.

Becky explained that except for the endless panorama of wheat fields and grain elevators of western Kansas, boredom wasn't really a problem.

"I always seemed to have a crick in my neck, or a sore arm, or something. But you had to learn to work through these things. You learned how much you can put up with."

"Before the trip, I figured I'd spend most of my time philosophizing and solving the world's problems. But as it turned out, I was constantly wondering if I'd hit the person ahead of me, or be hit by the person behind me, or what I'd have for dinner that night."

Becky admitted that she and her fellow cyclists were often sore or uncomfortable.

"I always seemed to have a crick in my neck, or a sore arm, or something. But you had to learn to work through these things. You learned how much you can put up with."

"Some days I wondered, 'Am I being a masochist?' But then we'd start out again early the next morning, and everything would seem so fresh and beautiful that you felt really glad to be doing it. And then there was sort of an epic quality about the trip."

Since she began medical school in September, Becky hasn't let the rigors of student life interrupt her interest in physical activity.

She bicycles up and down the Hill each day and keeps her bike in her study carrel. She also plays squash and is trying to help organize a coeducational basketball team.

Becky commented on the value of physical exercise: "When you exercise, whatever form that exercise takes, it's a very external thing—and you're able to release pent-up energies in a very positive way."

Freshman medical student Becky Bascom bicycled across the country in 66 days last summer.



Photo by Wayne Eastburn, Eugene Register-Guard

Team will encourage minority students

A more concentrated and coordinated effort to bring minorities into health professions is underway at the Health Sciences Center.

President Lewis W. Bluemle, Jr., has announced the appointments of Dr. Keith Claycomb as assistant to the president for minority student affairs, Olvin Moreland as director of the office of minority student affairs and Nancy Caldwell as assistant director.

Although the Schools of Dentistry, Medicine and Nursing each have had individuals involved to some extent in working with minority students, President Bluemle said the coordinated effort reflecting the Health Sciences Center concept should be more effective not only in reaching minorities but in retaining them once they become students on the Hill.

In the planning for some months, the new minorities effort lends support to Governor Straub's executive order issued in October dealing with affirmative action in state agencies' employment and directing "the State Board of Education and

the State Board of Higher Education to give particular attention to the recruitment of minority and female faculty and students for academic programs in which these groups are under represented."

Dr. Claycomb and Mr. Moreland, who recently attended the first National Conference on Health Career Opportunity Programs, said there is an effort nationally to attract disadvantaged individuals to health careers.

They said the problem has not been in turning away minority students but in getting them to apply for admission.

In the past minority students have not been counseled toward adequate science preparation nor have they had the proper encouragement to enroll in health fields.

The Health Sciences Center minorities team plans to travel statewide to visit middle schools and high schools in an effort to reach students and counselors early enough so that students will get the right encouragement and have time to take as many science and math courses as necessary.

They also plan activities to make elementary-age youngsters "aware" of health career opportunities.

Additionally, they will help minority students with financial aid, housing, employment, tutoring and counseling.

Although their focus will be on blacks, Mexican Americans and American Indians, the three will also give some attention to orientals, who are already quite well represented in the various academic programs, and women, who are showing increased interest in dentistry and medicine. This fall, the enrollment of women in dentistry and medicine was up significantly and reflects increased numbers of women applicants.

Similarly, the number of men applying for the School of Nursing is reflected in the larger number of men students in nursing classes this fall.

Dr. Claycomb, chairman of the department of biochemistry in the School of Dentistry, has been director of minority recruitment for that School since 1972.

LSD research

(continued from page 1)

tic receptors discovered in the mammalian brain," Dr. Sato explained.

"We have examined the effect of LSD (lysergic acid diethylamide) on all kinds of postsynaptic receptor activities and found that it selectively blocks the inhibitory type of receptors specific to dopamine and serotonin with no effects on the other excitatory receptors."

This leads to a possible explanation of a person's abnormal actions under the effect of LSD. "Certain groups of neurons in the brain are excited by serotonin but inhibited by dopamine. If you block the inhibitory receptors of a neuron, naturally the excitatory input activity to the same neuron is exaggerated."

From his studies, Dr. Sato postulated that LSD blocks selected areas of the brain. One of the areas blocked effects vision (as an example, seeing psychedelic colors) and another is the basal ganglia, a part of the brain, which controls involuntary movement.

Some scientists have suggested that certain parts of the brain of schizophrenic patients may produce abnormal chemicals that are structurally similar to LSD.

This helps to explain why the thoughts and actions of a schizophrenic patient resemble the mental state and behavior of a normal person who has taken LSD.

Through their research Drs. Sato and Yai hope to learn the involvement of a particular type of transmitter-receptor system in producing specific patterns of hallucinations seen in schizophrenics.

Dr. Yai, an associate professor in the department of physiology at Saitama Medical College in Saitama, Japan, (near Tokyo) has been working with Dr. Sato on the project since early June. She will be here one year.

Clinic relocates

The School of Dentistry's Model Dental Team, which provides dental care to low-income or handicapped elderly persons has moved to a new location.

Previously located in the Hollywood East apartments, the team is now at Holgate House, 4601 S.E. 39th Street. Like Hollywood East, Holgate House is a high-rise for the elderly.

The move will give the team more room and better space utilization and will allow them to see more patients. The clinic currently has a five-month waiting list of elderly persons needing dental care.

Deadline nearing; interest in HSA grows

Interest in the soon-to-be-designated Health Service Agency for the northwest corner of Oregon is quickly mushrooming.

As the first of three Health Service Agencies (HSA) to be created in Oregon under the National Health Planning and Resources Development Act of 1974, the six-county HSA which includes Portland could come into existence as early as March.

Once established, HSAs will have considerable power over the formulation and implementation of health care policy in their areas and in the state, including distribution of federal funds.

They will review and approve federal funds for construction, mental health, and alcohol rehabilitation.

They will draw up "health systems plans" for improved health care facilities along with the annual implementation plan of how the systems will be put into use.

These plans, in turn, will form the basis for a state health improvement plan pre-

pared through the state health coordinating council and the state health agencies.

The general impression is that the HSAs also will be responsible for implementing a national health insurance program if one is approved by Congress. This would give them even more control of the health care network.

The creation of a Health Service Agency for Area I (Multnomah, Washington, Clackamas, Columbia, Tillamook, and Clatsop Counties) was undertaken earlier this year by the Portland Metropolitan Comprehensive Health Planning Association (CHPA). If designated by the secretary of HEW as the Area I HSA, the CHPA will cease to function in its present capacity.

In compliance with rules regulating the creation of HSAs, the CHPA notified numerous local and state agencies, sent materials and information, and scheduled speeches and public meetings.

The CHPA's executive committee was designated by the Association's board as

steering committee for the Health Service Agency.

Three meetings of the steering committee were opened to the public, and discussions were held concerning the HSA's future and legal requirements for its governing board's size, composition, selection, etc.

Joseph J. Adams, vice president for planning and resource development at the HSC and secretary of the CHPA executive committee, explained that at their November 20 meeting, the committee approved a governing board size of 48 persons with an executive committee of 15.

Of these 48, 26 (or 55 per cent) will be health care consumers, and 22 (or 45 per cent) will be health care providers.

After soliciting names for the HSA governing board, the CHPA executive committee nominated a broad spectrum of health care providers and consumers to head the new HSA. At that time, the board was expanded to 51 members.

A public board meeting then was held

to discuss the nominations at which further nominations were made.

Mr. Adams pointed out that the CHPA has moved fast to fulfill requirements under the new law in order that it may complete its application to become an HSA by January 19, the deadline for securing funding.

The agency hopes to receive approval from HEW by late in March.

Coordinator named

Dorothy Cutler began duties November 3 as the new coordinator of the Health Center for the Elderly, 1710 NE 42nd Avenue, Portland, part of the School of Dentistry's division of extramural programs.

Ms. Cutler, a registered nurse, is former In-Patient Coordinator for the Tri-City Comprehensive Community Mental Health Center in East Chicago, Indiana.

Medical students try their hand at research

Behind every major medical research discovery are years of painstakingly slow progress. Yet many medical students and physicians know relatively little about this side of medicine.

But thanks to a summer research fellowship program sponsored annually by the Oregon Heart Association, about ten students from the School of Medicine gain valuable research exposure each summer.

Filing deadline this year for the three-month, \$1,500 fellowships is February 1. Applications are now available from the dean's office and the Oregon Heart Association.

According to Howard Stroud, Association executive director, the fellowships are not merely intended to give students summer jobs.

"The fellowships are offered to help students in career decisions. They are a very definite learning opportunity, and we select students we think will benefit most from this kind of exposure."

Stephanie Harris, sophomore, received a Heart Association fellowship last summer and did research under Dr. Robert Brooks, associate professor of pathology.

Stephanie's project involved efforts to study emphysema in its early stages. Much of her work was in electronmicroscopy.

Of her contributions to his research, Dr. Brooks commented, "In the course of her work, Miss Harris made an important observation on the experimental lungs under study."

"This observation has now convinced us to pursue the project along somewhat different lines than heretofore planned and hopefully may provide us with new insights into the tissue alterations underlying emphysema."

Stephanie commented, "As a result of the project, I can see more relevance in what I'm studying now. It's made me a better student."

Sophomore Bill Crabb was also awarded a fellowship last summer. Bill studied mitral valve prolapse using echocardiography under Owen Brown, research associate in cardiology.

"I believe echocardiography will become increasingly useful," said Bill. "Since there is no specific course in echocardiography in the regular curriculum, I'll have a better understanding of it than my peers."

He added, "Research has its frustrating points. I had to gain a certain amount

of expertise before my measurements were of any value. It gave me a chance to look at some of the things researchers have to go through to get valid results."

At least three of last year's fellowship recipients, Wes Hoenshell, Tina Ciesiel, and Doug Myers, say they may set aside time for research in their future careers.

Wes said he has been interested in research since he was an undergraduate and hopes to work with his project director, Dr. John Gabourel, again next summer.

Wes's project involved the effects of a certain therapeutic drug on white blood cells.

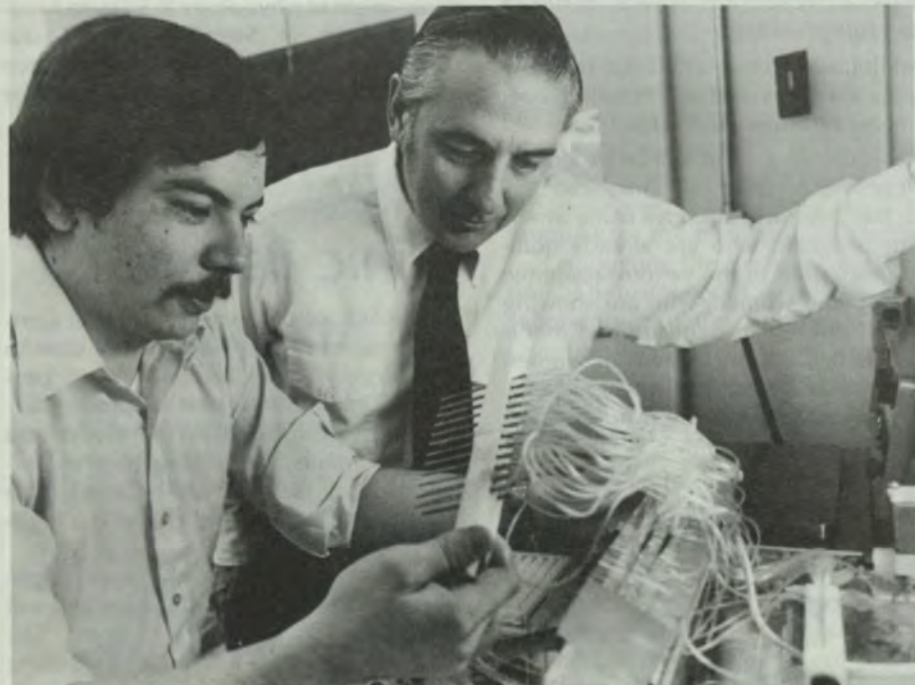
Doug Myers, who studied the involvement of the antibiotic gentamicin in kidney failure, said he is still intermittently involved in the project (under Dr. William Bennett, associate professor of medicine).

Tina Ciesiel commented, "Physicians need a better understanding of what happens in research. For example, in the area of drug reactions, the physician is the one who first sees the problem. He may be the one to suggest the problems that require research."

Tina's work involving acute intermittent porphyria, was under the direction of Dr. Robert Koler, head of the division of medical genetics.

Summer fellowships in research give students exposure to academic medicine. Pictured are some of last year's participants. Lower left, Wes Hoenshell, left, harvests human blood lymphocytes from a tissue culture, with assistance from Dr. Gabourel, professor of pharmacology.

Small photo, Fred Minnear, department of anatomy, the only graduate student in the program, works on the ultramicrotome. Large photo, Doug Myers weighs chemical for mixing in a buffer solution.



Doernbecher Guild board has annual meeting

The brightly colored curtains, modern light fixtures, and new graphics in the HSC's 14A pediatric ward are just one way the Doernbecher Guild has made life brighter for sick children at the Center.

At the Guild board's annual meeting

December 4, President Norman Workman announced the \$20,000 gift given through the Guild which made possible the renovation work in pediatrics.

The Guild, which was organized in 1924 to promote better care and research

in children's diseases, has about 200 members and is governed by a seven-member board.

At their December meeting, the board heard reports from pediatric physicians and researchers, as well as from Dr. Robert

Neerhout, new chairman of the department of pediatrics.

Dr. Neerhout pointed out that although the number of patients seen at Doernbecher Hospital (the pediatric wards of University Hospital South) has increased, the length of patient stays in the hospital has shortened due to increased efficiency of the staff.

He explained that fund support from Doernbecher Guild has supplied seed money that attracted interest and financial support from other sources. These areas no longer require Guild support.

Dr. Neerhout requested \$22,491 in funds from the Guild to cover specific areas of need, such as equipment, intensive care items, and project support.

The Guild voted unanimously to fund Dr. Neerhout's request in full.

Members of the Guild board are Norman Workman, Jane Goudy, Alice Cheatham, Dean Robert Stone, Dr. Neerhout, Director of Development Paul Weiser, and Dr. Donald Kassebaum, director of hospitals and clinics.



Renovation plans for pediatrics were described by John Hutchins, associate director of hospitals and clinics, at the December 4 meeting of the Doernbecher Guild. The Guild Board also heard reports from Dr. Michael Miller, associate professor of pediatrics, and Dr. Robert Campbell, professor of pediatrics, who discussed functions and projects of the Pediatric Bacteriology Laboratory and the Pediatric Renal-Metabolic Laboratory. The Guild approved requested funds.

First pediatric nurse practitioners complete training



Four students, all registered nurses, the first class of the new Pediatric Nurse Practitioner (PNP) Training Program at the Health Sciences Center's School of Nursing will be going home soon to Dallas, Oregon, Grants Pass, Waldport, and Salem.

But once they get home, after three months of intensive classroom and clinical study at the HSC, their work in the program is far from over.

Starting in December, after Christmas, they will each spend six months in "internship" working with a preceptor, a local physician who agrees to sponsor and supervise them so that they gain clinical competence.

When they graduate from the program in June, after a total of nine months of study and training, the four students will be among the first nurse practitioners ever trained in Oregon. Prior to the program a few Oregon nurses had received on-the-job training, but this is the first university program to train nurses to return to their home communities.

What is a nurse practitioner? Basically it is a registered nurse who has taken additional training to expand her or his role in health care.

According to Pam Hellings, program director and a PNP from a UCLA program, the nurse practitioner has many skills and responsibilities a registered nurse does not. They can take medical histories, do physical exams, make advance nursing assessments, and take care of patients in a number of emergency and chronic situations.

A nurse practitioner is not intended to replace, but collaborate with physicians to provide the best possible care for a pa-

tient, she said.

The Oregon program, which is funded for three years by a \$294,800 grant from the U.S. Department of Health, Education, and Welfare (HEW) is specifically to train pediatric nurse practitioners.

Other programs elsewhere train nurse practitioners in the fields of family planning, nurse midwifery, geriatric nursing, and pediatrics.

The first class from the program consists of four county health department nurses, all currently on leave from their departments.

Mrs. Hellings explained that pediatric nurse practitioners are not taking over the responsibilities of the pediatric physician—a controversial contention.

She points to the philosophy of the Oregon PNP program which states that "registered nurses in ambulatory care have been inappropriately utilized and physicians have been performing tasks that nurses are already trained to perform or can easily be trained to do."

"It is appropriate for registered nurses to expand their role, building on their knowledge of health sciences and skills in counselling and teaching, to improve the quality and accessibility of primary health care services to children."

She adds that the program is aimed at supplying PNPs for rural areas of Oregon rather than the Portland metropolitan area.

"We feel this program has its greatest application in small towns," she said. "Not one of our first students, nor any in our second class (which starts in January), are from the Portland area."

The current class in the program numbers four and future classes will also be small, averaging about six with a maximum of about eight members.

Other faculty members associated with the program are Cathy Burns, pediatric nursing instructor; Dr. Helen Tochen, assistant professor of pediatrics; and Sue Aronson, instructor in pediatric nursing.

Pediatric Nurse Practitioner Trainee Judy Buswell, of Dallas, Oregon, checks three-year-old Dean Young's eyes during a physical exam at the Albina Health Center.

Dr. Bluemle travels to Moscow for dialysis symposium

Health Sciences Center President Dr. Lewis W. Bluemle, Jr., and his wife will spend 10 days in the Soviet Union in late February as part of a USSR-USA Symposium on Dialysis.

The symposium is being sponsored by the USSR Ministry of Health and the USSR chamber of commerce. Dr. and Mrs. Bluemle, the only representatives from the west coast, will join a delegation of three other nephrologists and their wives, who will represent the United States at

the two-day symposium in Moscow. A private corporation will pay the group's travel expenses.

During the symposium, Dr. Bluemle will speak on his experience with dialysis for renal failure. He will give addresses on "Epidemiology of Chronic Renal Failure" and "Adequacy of Dialysis Treatment of Chronic Renal Failure."

He will moderate a session on the problems and complications of chronic renal failure and also participate in a

discussion of the future of dialysis.

A former consultant to the Artificial Kidney/Chronic Uremia Program of the National Institutes of Health, Dr. Bluemle is past president of the American Society for Artificial Organs.

From 1951-68 he was chief of the dialysis unit, University Hospital, University of Pennsylvania. From 1966-67 he was a member of a study group on the treatment of chronic renal diseases, U.S. Bureau of the Budget, Washington, D.C.

Dr. and Mrs. Bluemle's trip will include four days in the seaport city of Leningrad and six days in Moscow. The U.S. delegation plans to visit several academic health centers in both cities.

Those making up the U.S. delegation include Dr. Bluemle, Dr. George R. Baker, Massachusetts General Hospital, Boston, Mass., Dr. Wadi N. Suki, Baylor University College of Medicine, Houston, Tex., Dr. James E. Clark, Crozier-Chester Hospital, Chester, Pa.

Scientist points out risk in drug interaction

A discovery by an HSC research scientist is responsible for saving thousands of persons from irreversible hearing loss due to the interaction of two commonly prescribed drugs.

In the early 1970's, an increasing number of physicians documented an unusual phenomenon. Certain patients for whom they prescribed some diuretics became irrevocably deaf. No one understood the reasons behind this tragic result.

Clinical accounts relating permanent deafness to patients who were receiving both an aminoglycoside antibiotic and the suspected diuretics caught the attention of Dr. Robert Brummett, associate professor of otolaryngology and assistant professor of pharmacology.

It appeared to Dr. Brummett that these drugs in combination could produce irreversible hearing loss.

Animal experiments proved this hypothesis to be true. In 1973, Dr. Brummett published the results of his work which proved that the drugs did, in fact, interact.

Dr. Jack Vernon, professor of otolaryngology and director of the Kresge Hearing Research Laboratory, said of his colleague's research, "There is no way to estimate the great value of Dr. Brummett's discoveries. His work has saved literally thousands and thousands of ears."

Dr. Brummett, whose study of the problem is on-going, explained that the antibiotics involved in the problem are aminoglycoside antibiotics, which include such life-saving drugs as streptomycin, neomycin, kanamycin, gentamicin, and tobramycin.

Diuretics which can produce deafness when taken in combination with these antibiotics are ethacrynic acid and furosemide.

These are the most potent of diuretics and can cause the kidneys to put out urine when other drugs fail. They, also, can be life-saving.

"These drugs were commonly prescribed in combination, especially in patients with chronic renal disease," said Dr. Brummett.

He continued, "We found that a single dose each of the antibiotic and either of the two diuretics given to a guinea pig could produce total cochlear destruction within two hours.

"Hair cells in the cochlea—the cells that are responsible for converting sound energy into impulses that can travel up the cochlear nerve—were destroyed."

His present research centers on discovering exactly what causes the hair cells to disintegrate.

Dr. Brummett commented that although most physicians are now aware of the dangers inherent in using the two types of drugs, there is still a risk.

"People tend to get complacent about these kinds of interactions. A physician may use the drugs in small doses to solve his patient's problem.

"The physician is pleased with the results, and the patient doesn't complain. But our work indicates that interaction even in small doses causes destruction of hair cells which handle sounds at higher frequencies than those needed in normal communication.

"Loss of auditory function involving these high frequency sounds may make it very difficult for the patient to communicate in a noisy environment, but have no detectable effect when he is in a relatively quiet place.

"Repeated insults of this kind increase the loss. This can happen very insidiously."

Last month, Dr. Brummett published an article in *Acta Otolaryngologica* with important ramifications for physicians who must, for the patient's very survival, prescribe the two types of drugs in combination.

In the article, he discussed another major finding. Animal research has shown that furosemide is definitely the safer of the two diuretics. A much larger dose of it is required to produce an interaction that can cause a hearing loss.



DR. ROBERT BRUMMETT
department of otolaryngology

Dr. Brummett believes that future research into the problem will involve testing new and existing drugs in an effort to discover those which are effective in curing the patient without producing deafness.

He has also proposed a research project involving Drs. K. E. Fox and Nancy

Russell of the department of pharmacology. The study is designed to determine the mechanism by which this interaction occurs.

Physician, nurse earn Air Force thanks for bravery

Two staff members at the Health Sciences Center have been honored by the U.S. Air Force for bravery shown last December when the helicopter which they were aboard crash-landed during a neonatal emergency mission.

The mission was one of several dozen such helicopter flights which the Air Force has flown in conjunction with the UOHSC. The object of the missions is to bring distressed infants from outlying areas to the neonatal intensive care unit (NICU) at the Health Sciences Center.

Receiving certificates of appreciation last month from the Air Force were Dr. Raul Banagale, fellow in neonatology, and Joan Silbernagel, R.N. in the NICU.

Dr. Banagale and Miss Silbernagel were responsible for saving the life of an infant following the crash-landing last year in the Columbia River Gorge.

The certificate presented to Dr. Banagale stated that on December 31, 1974, "Dr. Banagale volunteered to fly in an Air Force helicopter from Portland,

Oregon, to La Grande, Oregon, to attend a critically ill infant. On the nighttime return flight to the University of Oregon Medical School, the aircraft developed engine failure and crash landed in the Columbia River Gorge.

"With unusual presence of mind, Dr. Banagale assumed responsibility for removing the child, as well as an accompanying nurse, to shore, where they were placed in survival sleeping bags.

"This effort undoubtedly contributed to saving the infant's life. By his prompt action and humanitarian regard for his fellow man, Dr. Banagale has reflected great credit upon himself and earned the sincere gratitude of the United States Air Force."

Miss Silbernagel's citation was similar but stated, "With unusual presence of mind, Miss Silbernagel redeemed the child from the water and, with the assistance of an on-board physician, carried it to shore and kept it warm until a rescue helicopter arrived."



Dr. Raul Banagale and R.N. Joan Silbernagel check infant in NICU.

School of Dentistry plans new continuing education center

One of the most active continuing dental education programs in the country may have a new continuing education center by the fall of 1976.

The Health Sciences Center's School of Dentistry Alumni Association has recently granted \$20,000 to the HSC for initial planning of a new facility, which will be located in the basement of the School of Dentistry.

"The date we optimistically shoot for in the completion of the new center would be in the fall of 1976," said Darwin Reveal, director of the continuing dental educa-

tion program.

He commented that \$152,000 of the \$200,000 needed to complete the center has been raised.

Mr. Reveal said the fund drive this year is ahead of last year. "We have a 50 per cent increase from a year ago. With just one month left, this year's total is \$65,000 compared to \$43,000 a year ago at this time."

Tentative plans for the new center show that it will have double the floor space, from 2,000 to 4,000 square feet, of the current center.

There will be two conference rooms immediately adjacent to the clinic plus an audio-visual room which will feature one chair, set up for closed circuit television. Technique space will triple in the new center.

The new center will have all new equipment while the current 12-chair facility, which had new equipment installed last year, will become part of the School of Dentistry's graduate periodontics and endodontics program, Mr. Reveal said.

Mr. Reveal pointed out that input from alumni and other dentists will be sought as

the new center is being planned.

"We want a facility which responds to the needs of the participants in our program," he said.

Mr. Reveal calls the HSC continuing dental education program "one of the most active in the country. We offer over 100 courses and 29 study groups each year. About 5,000 people participate annually."

It is a regional program which draws participants from throughout the Northwest. But there have also been participants from all over the U.S. and around the world.



Changing one's eating habits isn't easy. The transition to a low-cholesterol diet can take up to ten years, says an HSC research team. Above, Project Director Dr. William Connor and Lab Technician Liz MacPherson work with Auto Analyser II which allows scientists to measure an individual's adherence to the new diet.

From meat to beans—in ten short years

The drive of mankind for material abundance has led to a surfeit of foods of all kinds and quantities. As a result, a whole new spectrum of diseases has developed—caused or heightened by nutritional factors.

An important experiment designed to change the eating habits of 200 Portland families will soon begin under the direction of Dr. William Connor, HSC professor of medicine.

Dr. Connor explained that the "diseases of overconsumption" which are associated with the present American diet are atherosclerosis, coronary heart disease, stroke, high blood pressure, obesity, diabetes mellitus, and gallstones.

Dietary factors linked with these diseases are excessive intake of cholesterol, saturated fats, calories, sugar and salt and an insufficient intake of complex carbohydrates and fiber.

Nutritional factors have a significant, if not the most crucial, role in the development of coronary heart disease.

Dietary cholesterol and saturated fat lead to an increased serum cholesterol

level. The higher the level, the greater the risk of developing atherosclerosis. Then the final clinical event of coronary heart disease, myocardial infarction and sudden death, may ensue.

Dr. Connor and his research team hope to alter this pattern. Over the next year, they will identify 200 families willing to follow what he calls the "Alternative American Diet."

In this diet, high-cholesterol foods (including meat, butter, whole milk) are gradually decreased or eliminated, and the use of salt and sugar is reduced.

The loss in calories from decreasing use of meat and animal fat is made up by increasing the amounts of whole grains and legumes (such as navy beans, pinto beans, lentils, etc.), complex carbohydrates (such as potatoes, pasta, vegetables) and fruits.

"We are particularly interested in working with families because it is within the family that eating patterns are established," said Dr. Connor.

"Changing to a new way of eating takes considerable time. The physician and dietitian must take great care in explaining the why's and how to's of this plan and provide new recipes and other

information about this way of eating.

"We plan to have group sessions so that people can help each other and share things with which they've had success. Dr. Joseph Matarazzo, chairman of the medical psychology department, will head these sessions."

The Connor family's own gradual adoption of the Alternative American Diet — it took them five years to change — makes them skeptical of a sudden switch in eating habits.

Sonja Connor, the physician's wife and research dietitian for the project, commented, "Humans make changes slowly. They do not respond to edicts. We estimate that it takes two to 10 years to make the transition."

Dr. Connor continued, "Once we've learned the techniques that make the transition to an alternative diet easier for these 200 families, we should have enough information to begin educating the public."

"We also hope to work with food manufacturers and grocery stores so that they will make it easier to obtain foods which, for example, contain less salt and undesirable fats."

Newsmakers



GENROSE ALFANO
Nursing Alumni Seminar speaker

Genrose Alfano, director of the Loeb Center for Nursing and Rehabilitation, Montefiore Hospital, Bronx, New York, will be the featured speaker at the first Nursing Alumni Seminar, February 26.

"The Caring Role of Nursing" is the subject of the day-long professional meeting to be held in the HSC auditorium. All School of Nursing graduates are invited as well as interested nurses.

Panel discussions and question periods are planned for the session, according to the steering committee.

Miss Alfano, director of the Loeb Center since 1969, believes too much em-

"D"s now at 10,000

Response of Oregonians to the state's new Donor Program is surprising almost everyone involved with the project, according to the state Motor Vehicles Division.

Already 10,000 persons have requested that "D" for anatomical donor be placed on their driver's licenses. This means that in the event of their death, specified organs will be removed for use in humans and research.

In addition to the thousands who have already signed up, an additional 200 persons a day are indicating that they wish to be donors, according to the Motor Vehicles Division.

A spokesman for the Division commented, "The only loose end we have right now is making sure that donors not only have 'D' typed on their licenses, but also that they know they must have a signed and witnessed donor card with them at all times."

phasis has been put on the "cure" activities of nursing to the neglect of "care."

At the Loeb Center, only professional nurses give direct care to patients with the same number of nurses on duty days and nights.

This allows patients to choose times for treatments depending on living patterns and fatigue levels. Patient involvement in care at the Center is extensive.

Information about the seminar and registration forms are available through the School of Nursing Association, 3181 S.W. Sam Jackson Park Road, Portland 97201.



DR. JOHN BURKHARDT
nice person of the month

The traits of "unfailing consideration, kindness, thoughtfulness, and patience" are hard to come by.

But the University Hospital North Courtesy Committee believes Dr. John

Burkhardt, resident in obstetrics and gynecology, is a man of these qualities.

The Committee named him Nice Person of the Month for November. Employees who nominated Dr. Burkhardt for the honor commented that he never "blows up or loses his cool even when things go wrong." They also cited his "honest, fair, sensitive" character.

Employees who received honorable mention as November's nice people were: Phyllis Bradford and Holly Carothers, volunteers, 2NE UHN; Bruce Holiday, hospital aide, 3NE UHN; Jeanette Kee, financial counselor, admitting office UHS; Beverly Swanson, dietary department UHN; and Dorothy Vossen, RN, night supervisor UHN.

Dr. Robert and Dr. Barbara Wagner, the first married couple to intern together on the HSC campus in 1972, are now living in the Stafford, Oregon, area. Robert has opened a practice in Lake Oswego, and Barbara is working part-time in the Gresham Hospital emergency room and caring for the couple's two small children.

The U.S. Consumer Product Safety Commission has awarded UHN a certificate of appreciation for its efforts as the Oregon center for NEISS, the National Electronic Injury Surveillance System. In the photo below, Mary Lee Battaglia sends in a daily report on products which injured patients who were seen in UHN's emergency room. NEISS was organized to help reduce injury due to hazardous products.



VIPs

DECEMBER Service Anniversaries—From Personnel

Five Years

Dr. Jan Faber, physiology
Helen Simons, UHS nursing
Joanna Mally, UHS nursing
Terry Christopher, hosp hskpg
Martha Courtney, radiology
Dr. Julian Reinschmidt, ORMP
Nola Beckett, UHN nursing

Ten Years

John Rainwater, physical plant
Patricia Renwick, animal care
Dr. William Sack, psychiatry
Josephine Lattanzi, public health
Margaret Krafthefer, UHS nursing
Eugene Van Heusden, hosp hskpg
Suzanne Bignon, OPC admitting
Eleanore George, ECG lab
Eralia Gonzales, CCD

Fifteen Years

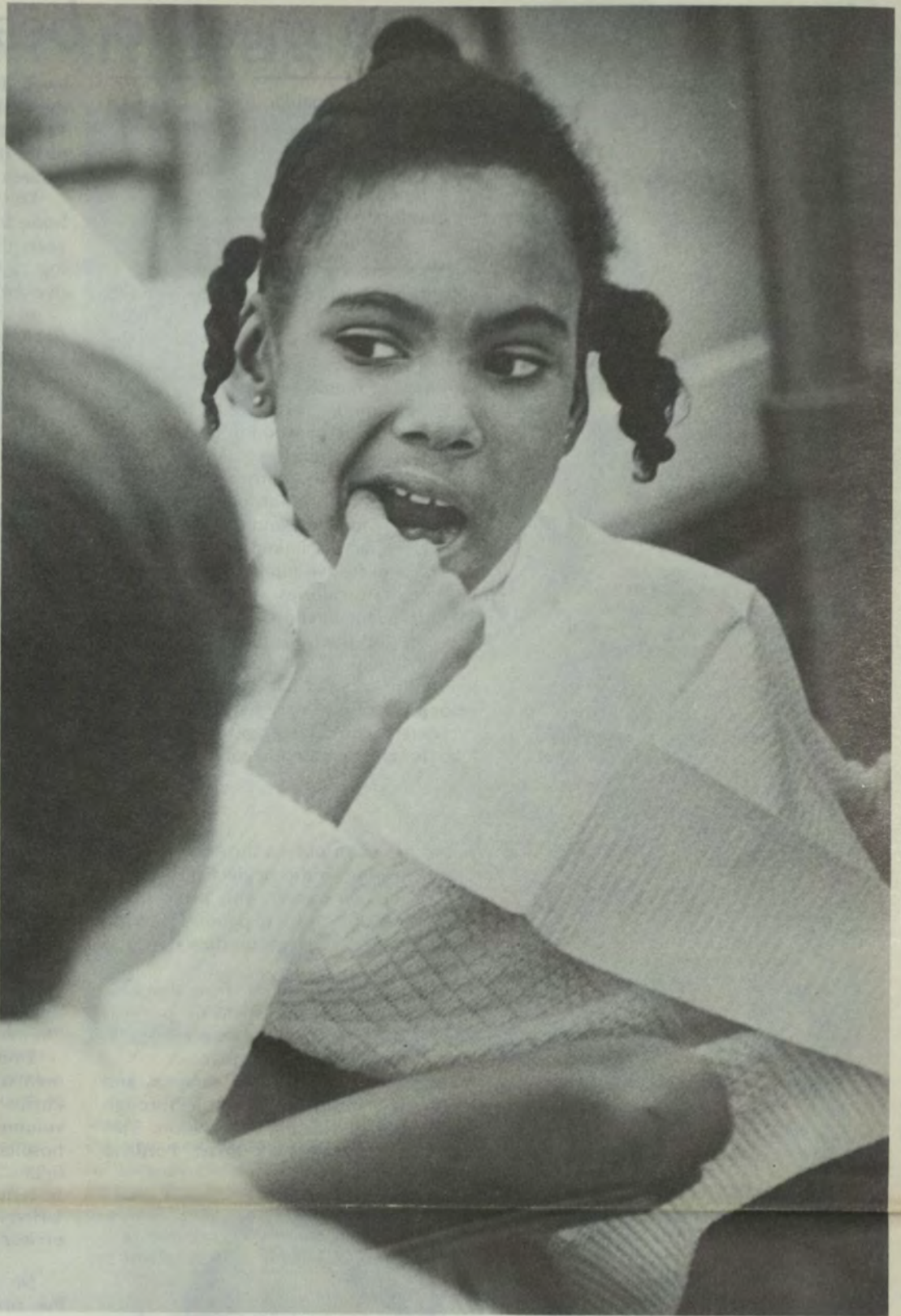
Dr. Gorham Babson, pediatrics
Ronald Sauter, anatomy
Betty O'Neal, social services
Robert West, physical plant

Twenty Years

Verna Williams, UHN dietary

Retirements

Clarence Elwood Heaton, physical plant
Odalee Robinson, UHN nursing



Dental students, children learn from each other

Early this month, 110 children from Sabin Elementary School got together with freshmen dental hygiene and dental students to discuss and learn about the prevention of dental problems.

As part of a freshman course on preventing dental diseases, the School of Dentistry invited Sabin youngsters to participate in two clinic sessions.

This was the first experience which the freshmen have had with patients. For some of the children, the field trip was their first dental appointment.

Not only were the children's teeth and surrounding tissues checked and indexed for a follow-up appointment the next week, but the youngsters were also taught fundamentals of good oral hygiene.

Dr. Stephen Clark, associate professor of periodontology, believes the two-year-old course in preventive dentistry is unique.

"A 10-member faculty team representing nine departments has thought enough of the course and its objectives to have had weekly, 8 a.m. planning meetings since June. The course began in October."

He commented that the course, which is required of all freshmen dental and dental hygiene students, gives a broad view of preventive practices and techniques.

Dr. Clark pointed out that preventive dentistry involves more than most people realize.

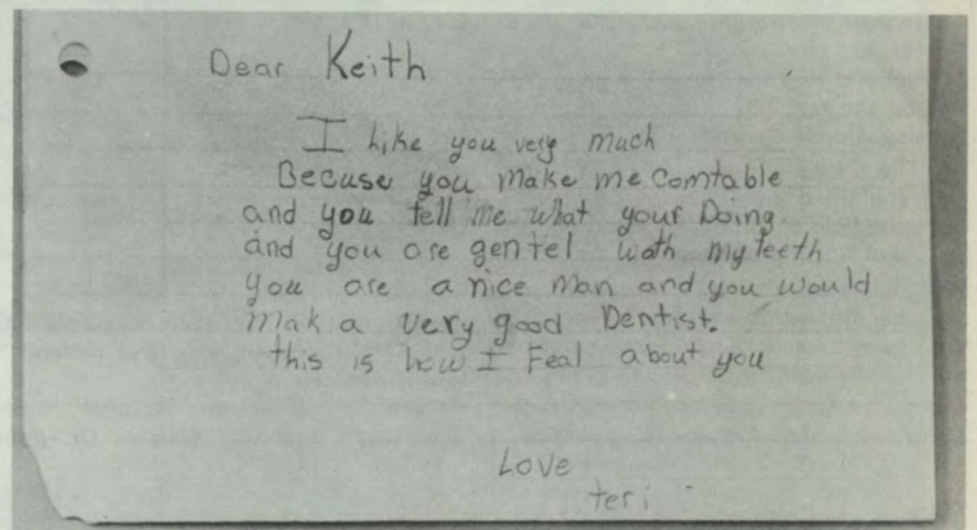
"Many people think of dentists mostly in terms of tooth extractions and repairs. They assume that having dental problems and losing one's teeth are inevitable facts of life. But that's not true."

One of the dentist's jobs is teaching preventive care techniques which will help

assure conservation of teeth, he explained. Preventive dentistry is a complex field, and through research, techniques are continually being developed and improved.

"Many people think of dentists mostly in terms of tooth extractions and repairs. They assume that having dental problems and losing one's teeth are inevitable facts of life. But that's not true."

"We hope our students will develop a strong and lasting interest in preventive care so that in future years, they will make the prevention of dental diseases an important and effective part of their practices," said Dr. Clark.



Letter from a young visitor to her new-found friend at the dental school.

HEALTH SCIENCES CENTER NEWS

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