



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.*

## 'We must all cooperate' in HSC energy-saving effort



Have you noticed a chill in the air — after you've gotten inside your office or classroom?

Does it take you a moment longer to recognize that person striding toward you down the dimly lit hall?

If so, then you're probably feeling the University of Oregon Health Sciences Center's energy conservation program at work.

In response to the state and national call — and to fiscal realities on the Hill — the Health Sciences Center is stepping up efforts to save energy resources. It's turning down heat and lights and trying to turn people on to conservation.

"We have been asked by Gov. Atiyeh to do our best as an institution to go as far as we possibly can to conserve energy," said Dr. Leonard Laster, HSC president. "We shall comply. We shall do our part — and more. Of course have."

"There are, of course, exceptional constraints upon us. For example, we cannot do anything that would jeopardize the patients in our care. However, we can change habits."

"Lights can be extinguished when not needed; heavier clothing can be worn to permit work at lower temperatures; and instruments can be turned off when not in use. Every small action will make a dif-

ference in the aggregate."

However, Dr. Laster added, the effort will take more than flicking off a light switch, sparing the hot water in the lavatory or donning a sweater, although all are helpful. It will require adjusting schedules and rethinking programs.

"Ralph Tuomi (director of facilities management) and his colleagues who saw us through the recent ice storm will help us to define a program for the conservation of energy on Marquam Hill," he said. "We must all cooperate."

Expressing the kinds of changes that probably will be necessary, said Mr. Tuomi, is a proposed new HSC program for reducing electrical consumption.

Prepared in late December at the request of the Governor's Office, the proposals reflect an intended 5 to 10 percent reduction in kilowatt hours in non-health care areas. The reduction is over and above cuts made in the past few years.

The proposals have been sent to the Governor's Office and are to be submitted to the HSC Faculty Senate for consideration.

The reduction program includes the following proposals:

- Reduce the hours of operation of the ventilating fans and other heating and air conditioning systems in Baird Hall, MacKenzie Hall, library, School of Dentistry, physical plant, Gaines Hall, animal farm buildings, Child Development and Rehabilitation Center, Student Activities Building and residence hall. This will not affect programs in health care or research.

- Reduce the hours several of these units will be open.

- Reduce corridor lighting by an addi-

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*Unpredictable weather conditions — such as the ice storm that struck in January — and ever escalating prices of oil and electricity give further impetus to vital campuswide programs of energy conservation. New proposals for reducing electrical consumption at the UOHSC are now being considered.*

## New vice president to handle finance, administration

Dr. James T. McGill, associate vice chancellor for resource planning and allocation of the University of Illinois at the Medical Center, Chicago, has been named vice president for finance and administration at the UOHSC.

In this position, Dr. McGill will be responsible for the development, interpretation, coordination, administration and implementation of policies on fi-

nance, accounting, personnel, management information systems, data processing and physical facilities.

"Dr. McGill will, in the opinion of those of us who were involved in his selection, help to strengthen both the University's management and its fiscal credibility with the legislature, the executive branch and the lay public," President Leonard Laster said in mid-January when he announced

the appointment.

A native Oregonian, born in Portland and a graduate of Stayton Union High School, Dr. McGill will begin his duties no later than July 1, 1980. He holds two baccalaureate degrees from Oregon State University and a Ph.D. in operations research from Stanford University.

In his present position, which he has held since 1976, Dr. McGill is responsible

to the vice chancellor for academic affairs for short-term and long-range resource planning and allocation. He directs staff in the areas of budget development, facility planning and space utilization, and institutional research as well as computer systems development.

When his appointment was announced to his future UOHSC colleagues in admin-

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## Academy of Sciences president tapped for commencement

Dr. Philip Handler, president of the National Academy of Sciences, will be the featured speaker at the UOHSC's 1980 commencement ceremony June 8.

A noted researcher, educator and public servant, Dr. Handler was elected to lead the National Academy of Sciences, Washington, D.C., in 1969 and was re-elected in 1975.

He recently was named to President

Carter's Commission for a National Agenda for the Eighties. He heads the U.S. delegation to the Scientific Forum scheduled Feb. 18-29 in Hamburg, Germany, a part of the Conference on Security and Cooperation in Europe mandated by the 1975 Helsinki Accords.

After receiving his Ph.D. from the University of Illinois at the age of 21, Dr. Handler spent 30 years on the faculty of

the Duke University School of Medicine. He was James B. Duke Professor of Biochemistry (a title he still holds) and chairman of the biochemistry department.

During his tenure at Duke he cultivated his research interests, which include niacin and choline deficiency, intermediary metabolism, renal mechanisms and hypertension, biological oxidation, and evolution.

His studies of pellagra — a disease associated with a diet deficiency in niacin and protein — led Dr. Handler to propose to Southern state legislators in 1940 that commercial cornmeal sold in Southeastern states be fortified with nicotinic acid. When this process was mandated, it markedly accelerated the disappearance of pellagra from the American Southeast.

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# Compassion sent nursing alum to Cambodian refugee camp

Darlene Collins had followed newspaper stories about the plight of the starving Cambodian refugees. But a TV newscast one evening last November made her want to do more than read about it.

"I happened to see these adults who were just skin and bones. It really got to me," recalled the 1974 graduate of the UOHSC School of Nursing.

Within two weeks, the 33-year-old Portlander was on a plane bound for Bangkok, ready to apply her skills as a community health nurse to a different and desperate need.

Now, looking back on her five-week mission in a Cambodian refugee camp, Mrs. Collins calls it "the experience of a lifetime."

She was on a team of volunteer medical professionals from the Northwest sponsored by World Vision International, a church-affiliated service agency.

The genial nurse gave herself a crash course in tropical diseases and rounded up sponsors to support her financially during her unpaid leave from the Multnomah County Health Department. (One group

donated \$400 in bingo proceeds.) She left Portland Nov. 26.

For the next few weeks, Mrs. Collins' place of work was Camp Sakaeo, 150 miles south of Bangkok and 40 miles from the Cambodia-Thailand border.

Here, amassed in a 33-acre city of tents in the 100-degree heat, were 35,000 of the hundreds of thousands of Cambodian people who have fled across the Thailand border since the Communists' overthrow of the Lon Nol government in 1970.

Severe malnutrition, malaria, parasites, anemia and pneumonia were rampant. Fears of cholera and typhoid outbreaks — and of a Vietnamese attack — plagued the camp.

Still, Mrs. Collins said, "It wasn't nearly as bad as I had thought. Living conditions were as bad as I had anticipated, but it seemed by the time the American team got there that the people were doing better. There were seven established wards in long huts, and we had all the medical supplies we needed."

Although the refugees had been told that Americans are ferocious people who

devour babies, Mrs. Collins said incredulously, they soon discovered this was erroneous. She and her colleagues developed close friendships with patients and Cambodian aides during those long work stints.

She recalled one night when she was the only nurse on the ward. "The doctor told me as she was leaving that I had three malaria cases. All of them had been seizing, all were in comas. She looked at me and said, 'Now, this lady should not die tonight' — and I knew that she had better not die.

"So I 'specialed' all three of those cases that night, and two hours later one of them opened their eyes, looked at me and smiled. It was amazing how, once you got them into the hospital and got IV's going, they would improve."

Reflecting on her overseas experience after her Jan. 2 return home, Mrs. Collins said, "I really feel that we went over there and saved lives. That sounds dramatic, but I know we did . . . That was worth all the tiredness, all the long hours we put in — just to see somebody well."



**DARLENE COLLINS**  
1974 graduate of School of Nursing

## Newsmakers

Dr. Victor Menashe, director of the Crippled Children's Division, has been elected president of the American Association of University Affiliated Programs. The association has 47 programs in 33 states and the District of Columbia whose purpose is to train professionals in the health, educational and social disciplines about the care and management of developmentally disabled persons.

Dr. Martin Lees, professor of pediatrics and perinatology, has been appointed to the executive committee of the American Heart Association. Dr. Lees also is chairman of the Sub-board of Pediatric Cardiology of the American Board of Pediatrics.

The Honor Award from the American Academy of Otolaryngology has been presented to Dr. Alexander Schleuning, acting chairman and associate professor of oto-

laryngology and maxillofacial surgery. He was cited for his contribution to the academy's educational programs.

Charlotte Funk, supervisor of the MacKenzie Hall mailroom, has been elected Chairman of the Greater Portland Postal Customer's Council. According to the U.S. Postal Service, the mailroom is among the top 10 in Portland in terms of its volume of diversified incoming mail.

Dr. Donald Kassebaum, vice president for hospital affairs, has been elected a representative of the Council of Teaching Hospitals on the delegate body of the Association of American Medical Colleges, the AAMC Assembly. The AAMC's purpose is to advance medical education and the nation's health, and it participates in setting standards for medical education and patient care in U.S. medical schools and teaching hospitals.

As president of the Western Society for Pediatric Research, Dr. Robert Neerhout is attending the society's annual meeting Feb. 6-8 at Carmel, Calif. Dr. Neerhout is professor and chairman of the department of pediatrics.

Three HSC faculty members have been appointed to the Governor's Task Force on Mental Health Programs for the Mentally and Emotionally Disturbed. They are Dr. Joseph Bloom, acting chairman of the department of psychiatry; Linda Kaeser, associate professor of graduate studies, School of Nursing; and Dr. Stephen Starker, associate professor of medical psychology and director of psychology services, Veterans Administration Medical Center. The task force's purpose is to plan for quality community services to prevent further hospitalization of the chronically mentally ill.

Phyllis Coyne, research assistant at the Crippled Children's Division, received the 1979 Professional Merit Award presented by the Oregon Therapeutic Recreation Society.

Dr. Eugene Sullivan of Portland, a clinical professor of surgery at the UOHSC, has been elected president of the American Board of Colon and Rectal Surgery, Inc.

Dr. Leonard Ritzmann, professor of medicine at the UOHSC and staff cardiologist at the Veterans Administration Medical Center, recently participated in the dedication of the Christian Medical Society's new central office headquarters in Richardson, Texas. Dr. Ritzmann is president of the 4,500-member society, which has both graduate and student chapters located mostly near medical complexes in the United States and Canada.

## West meets East on medical journey

Dried seahorses, reindeer antlers and ginseng root — not exactly corner drug store remedies in these parts, but they've been used for centuries in the People's Republic of China.

Herbal medicine and acupuncture were among the forms of traditional Chinese medicine that Patty Thorpe, HSC third-year medical student, had a chance to observe when she visited China. Miss Thorpe was one of 50 students from all over the United States who went on the two-week tour last July, sponsored by the American Medical Student Association.

*Miss Thorpe conducted "research" of her own during her China trip. She had a cold, and during a visit to New China Hospital in Shanghai, a doctor asked if she would like acupuncture.*

(The School of Medicine Alumni Association is sponsoring two trips to China in May. For more information, persons may contact the alumni office, 225-8231.)

On their trip, the students combined traditional tourist stops such as the Great Wall and Forbidden City with visits to medical facilities. These ranged from rudimentary clinics in countryside communes to big, modern hospitals in the cities.

The students found Chinese medical

practitioners using a combination of Western medicine and their own traditional style. "I really respect it," she said of traditional medicine. "So much of what they do works, even though studies haven't been done to document it physiologically."

The Chinese are starting to do more research on the use of acupuncture, herbal medicine and other traditional techniques. But it doesn't stop there.

At the Shanghai Institute of Materia Medica, Miss Thorpe saw sophisticated research projects ranging from development of anti-cancer drugs to work on gossypol, a cottonseed derivative being studied as a possible male contraceptive.

She found doctors very interested in communicating with Western people doing similar research. "They were thrilled to talk to people, even students, who could discuss their projects with them," she said. "They've been so isolated."

Miss Thorpe conducted "research" of her own during her China trip. She had a cold, and during a visit to New China Hospital in Shanghai, a doctor asked if she would like acupuncture treatment. She agreed to it — and the needle therapy did seem to relieve some of the discomforts.

Miss Thorpe will show slides of her trip and answer questions at a special presentation Feb. 22 at noon in room 1162, MacKenzie Hall.

## Students end up together in Liberia 'classroom'

When two School of Medicine seniors share the same classroom for an elective in public health, that's hardly news.

When the elective is "Clinical Field Experiences in International Medicine," there's a twist to the story. The "classroom" is Phebe Hospital in Liberia.

Paul DeChant and Mark O'Hollaren were both in Liberia at the same time on individual MAP-Reader's Digest International Fellowships when the beginning of Mr. O'Hollaren's stay overlapped the end of Mr. DeChant's session at the rural hospital.

## This nurse's patients are Cambodian refugees

Serving in the same refugee camp where Darlene Collins worked (see story above) is another UOHSC-educated nurse, Susan Steinfeld.

Miss Steinfeld, a registered nurse, completed her requirements for a B.S. in nursing in December and left for Thailand Dec. 27 with a team sponsored by World Vision International. She'll return in June

and will formally graduate that month with the Class of 1980.

A seasoned world traveler, Miss Steinfeld spent 18 months in South Korea as an Army nurse and three years in Saudi Arabia helping set up a hospital.

Her father, Dr. Gordon Steinfeld of Salem, is a 1942 graduate of the School of Medicine.

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# Cutting down on kilowatts aim of energy proposals

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tional 50 percent in most non-health care and some health care areas.

- Reduce office lighting by 25 percent.
- Reschedule, to the maximum extent possible, custodial services to daytime hours, thus reducing building operations and lighting at night.

- Establish a committee of research-oriented staff members to review and determine methods to reduce the hours the Basic Science and Research Buildings must be operational. (The HSC's major research programs are in those buildings.)

In both buildings, all fume hoods are connected to the central exhaust system, so it presently cannot be turned off for

fear of destroying research projects. (Fume hoods remove toxic fumes and other matter from research areas.)

*The proposed reductions could cut the HSC's annual electricity expenditures by \$25,000 to \$50,000.*

"Our goal, however, is to maximize the number of hours we can shut down building operating systems on nights and weekends," said M. Ronald Parelius, acting vice president for administration and finance. "Thus we are looking for alternatives in these two systems that would allow us to reduce energy consumption. One alterna-

tive is to have separate heating and ventilating systems for the air flow in critical areas."

The proposal notes, "Considerable gains in energy savings can be achieved in these two buildings." A building retrofit program has been proposed and engineering studies have been completed, but funding is not now available.

- Initiate an intensive awareness campaign to request the staff to turn off all unused electrical equipment and lighting. (Exceptions will be made for purposes of building safety and security.) Physical plant workers already have been directed to reduce all electrical use to only that needed to do immediate tasks.

According to Mr. Parelius, who helped prepare the proposals, "I believe we must also begin to work on methods to curtail the expansion of our electrical consumption. To that end, I have recommended we put together a task force to brainstorm and recommend mechanisms for reducing the rate at which our usage of electricity is growing, without impeding our mission."

The proposed reductions could cut the HSC's annual electricity expenditures by \$25,000 to \$50,000, Mr. Tuomi said.

Energy is a costly business at the Health Sciences Center. The estimated expenditure for electricity this fiscal year — not counting the upcoming rate increase — is \$790,000. For heating, the figure comes to \$1.4 million.

Because of the ever escalating prices of oil and electricity, noted Jim Busching, assistant director of the physical plant, the cold fact is that utility bills rise even as energy consumption dips. "This is why when we conserve energy, we don't talk about saving money; we talk about cost avoidance," he said. "There are no dollars

raining out of the sky."

The fiscal facts make conserving energy all the more vital, he said.

Since the initial energy crunch of 1973-74, the HSC physical plant has taken the following steps to save energy:

- Time clocks governing various building systems have been adjusted to shut down and restart the systems coincident with the opening and closing of buildings.

- Additional time clocks have been installed, controlling smaller sections of the system and allowing more "zone" control.

- Controls have been adjusted to minimize the cooling of air in the ventilating systems.

*Anyone with an energy-saving idea is invited to contact*

*M. Ronald Parelius, acting vice president for administration and finance, or Ralph Tuomi, director of facilities management.*

- Converter controls for domestic water heating have been lowered to reduce water temperatures.

- Lighting levels have been reduced in corridors and other areas by the removal of some elements from fixtures.

- Lighting levels in parking lots have been reduced.

In the future, said Mr. Parelius, the HSC may look to energy conservation measures that other state institutions are considering, such as reducing cafeteria hours and making winter work schedules correspond to daylight hours.

"There are just lots of things that people can do," he said, "if they really start putting their minds to it."

Anyone with an energy-saving idea is invited to contact Mr. Parelius or Mr. Tuomi.

## New vice president to join Center

(continued from page 1)

istration and finance, Dr. McGill said, "This institution is primed for significant advances in this decade. My goal is to have the administrative services element of this institution recognized as unexcelled by

any other in the state."

Dr. McGill came to the University of Illinois from the Illinois State Board of Higher Education, where he served from 1972 to 1976 and held several positions including deputy director, academic and health affairs. He also worked as a professional staff member, program analysis division, Institute for Defense Analyses, Arlington, Va., from 1969 to 1972 and as an operation analyst at Stanford Research Institute from 1966 to 1969.

He has served as a consultant to the Institute for Defense Analyses and to the General Accounting Office, Washington, D.C.

Dr. McGill's teaching career has included serving as a lecturer in mathematics, Sangamon State University, Springfield, Ill.; as an associate professorial lecturer in the department of management sciences, George Washington University, and as an associate professor in health resources management, School of Public Health, University of Illinois.

He has written or coauthored articles on issues relating to state-level planning for health professions education and health manpower planning. A member of four honorary societies, he also holds membership in several professional organizations.

Dr. McGill and his wife, Sylvia, have two sons and a daughter.



**DR. JAMES T. MCGILL**

*new vice president for finance and administration*

## Mechanics keep 'em running in cold

Lug wrenches, lube guns and long Johns are standard equipment for Leonard Mitchell and Larry Karsten when the frigid weather comes.

They are the ones with the shivery job of fixing the snow vehicles that clear the roads at the Health Sciences Center in

weather like the ice storm that recently hit Portland.

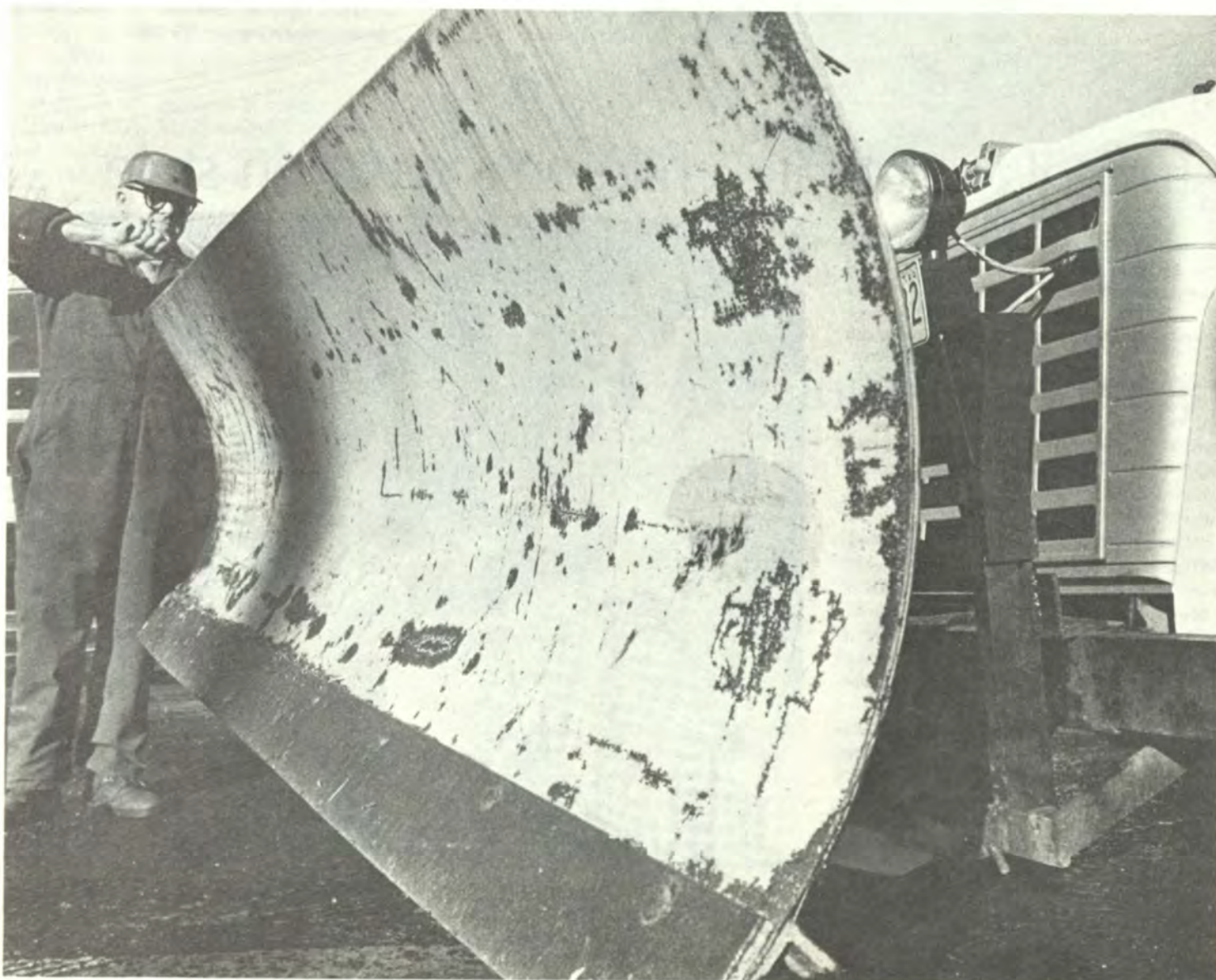
Pausing from a maintenance task in the physical plant garage, Mr. Mitchell remarked, "We can't shut the garage doors when we get the vehicles in here; the garage is too short. So you might say all our work is in the open air. Not necessarily the snow, but," he added with a laugh, "it's awfully close!"

The rigors of winter may call for the men to repair the blade on a snowplow or scoopmobile, put on new windshield wiper blades, or replace worn-out tire chains.

Actually, the snow vehicles are only five of the 106 vehicles that Mr. Mitchell, a plant maintenance repairman, and Mr. Karsten, an automotive mechanic, are responsible for maintaining.

During times like the ice storm, however, Mr. Mitchell admitted, the job tends to lose some of its "greasy charm."

*When the snow falls, drivers on campus can appreciate the work of Larry Karsten (left) and Leonard Mitchell (below), who keep the snow removal vehicles in shape.*





# Popular study clubs help dentists keep skills polished

They have names like the Gnathological Neophytes, the Portland Gum Club and the Bite Rite Occlusal Seminar I.

They're the dental study clubs in the School of Dentistry's continuing education program.

Popular among dentists throughout the country, dental study clubs give dentists a chance to get together to explore a subject of common interest, from periodontics to prosthetics. They offer a way to keep up in a complex profession.

"It's impossible to learn all that is necessary to know to practice complete dentistry in four years of dental school," pointed out Dr. Frederick Judy, a Portland periodontist and HSC clinical faculty member who organized and leads a study club in periodontal restoration.

*"You cannot keep up in the field without further education, because there are new things that occur every day in dentistry. Study clubs provide an avenue for that education."*

"You can learn the important basics that allow you to be a good practitioner and you can get a very good foundation to learn from. But if you don't continue the learning process after graduation, it's like standing still, and the rest of the world is going to walk right by you.

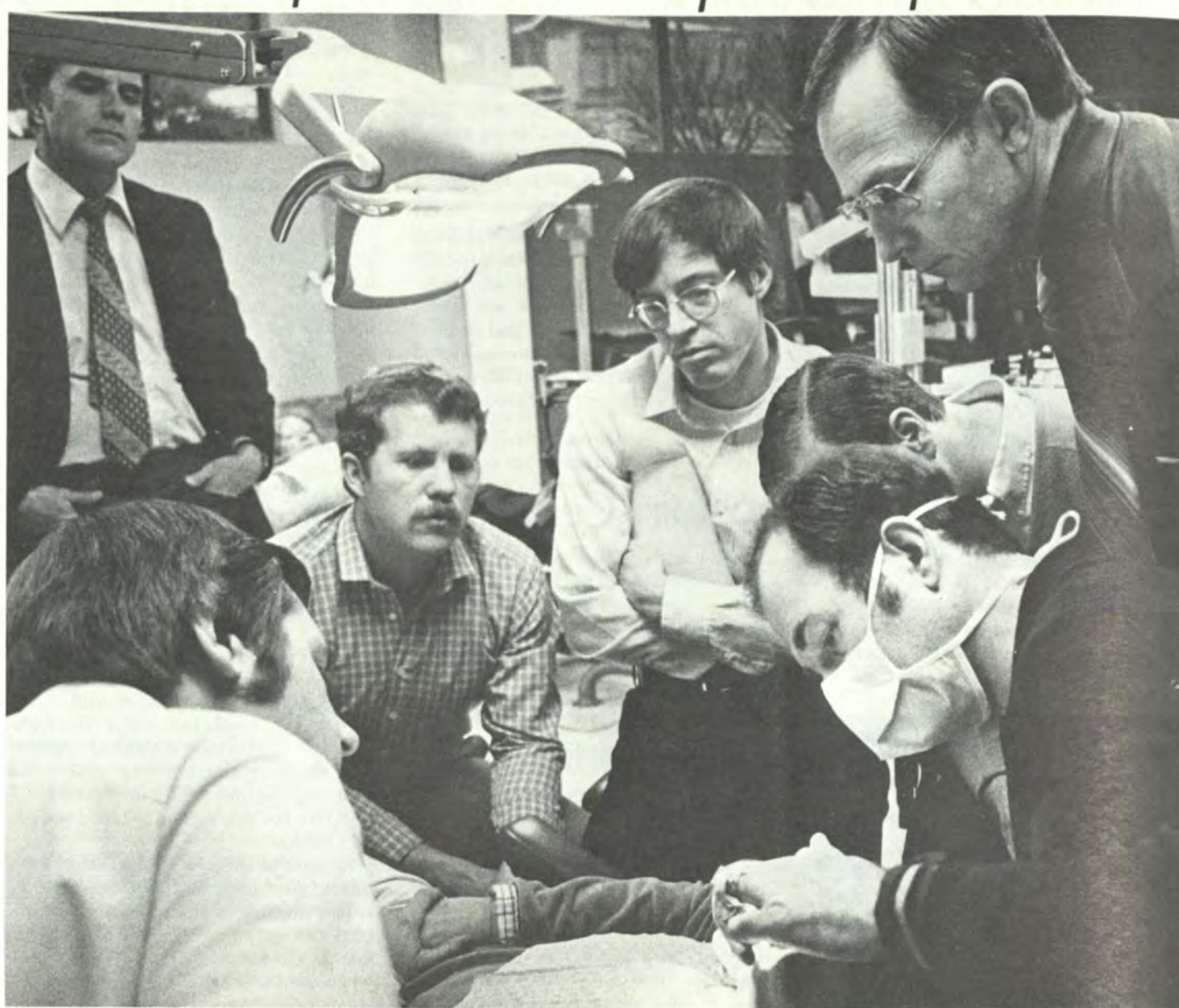
"You cannot keep up in the field without further education, because there are new things that occur every day in dentistry. Study clubs provide an avenue for that education," he said.

Although it doesn't actually sponsor the clubs, the School of Dentistry's continuing education program does provide facilities and supplies for 33 dental study clubs. A nominal rent fee is charged.

The School's continuing education program has helped organize about one-fourth of those clubs. Some form as a result of the program's continuing education classes, and the School often helps publicize and arrange the meetings.

"People who take part in study clubs have the ability to work with their colleagues, profit from each other's experience, and make clinical advancements by having experiences that others who just read wouldn't have," said Dr. Judy.

"I highly recommend the study club system. It allows the practitioner the opportunity to bring in difficult cases and to



share dental techniques with his colleagues."

Study clubs also give dentists a chance to pick up credits for licensure or for requirements of professional societies.

Meeting usually once a month, dental study clubs generally have a clinician who serves as mentor, giving lectures and demonstrations. Clubs often bring in other professionals as guest instructors.

"One of the nice things about study clubs is that members can pattern their learning experience based on their collective needs," noted Dar Reveal, director of continuing dental education.

"So they have a high degree of control

over what they learn. The clubs are flexible, and yet because of members' interests, they tend to be highly structured in terms of what they want to accomplish."

Members often take time to socialize, too. After an intensive day together in the lab or clinic, they may unwind with dinner at a restaurant.

In a 1977 survey of dentists conducted by the American Dental Association, 62 percent of the respondents indicated that they belong to at least one local dental study group.

"The clubs have existed in organized dentistry practically since its inception, I would guess," said Mr. Reveal. "Some of

*Giving Dr. Frederick Judy, Portland periodontist, their attention are members of a study club in periodontal restoration that meets in the continuing dental education facilities. This year the club is focusing on occlusion.*

the pioneers of dentistry were study club leaders. It's a very old concept."

Most dentists who take part in the School of Dentistry's study club program are from the Willamette Valley, although some come from as far away as Ashland.

Any dentist interested in joining or forming a study club may contact Ellen Weese, clinical assistant in continuing dental education, at 225-8857.

## Dental hygiene students celebrate children's week in style

February is that time of year when thoughts turn to matters of the heart — and teeth.

National Children's Dental Health Week enters the spotlight Feb. 4-8, well ahead of Valentine's Day.

And senior dental hygiene students at the Health Sciences Center are observing the week in appropriate style, by telling youngsters about good dental health.

As it happens, the special week falls during the students' six-week program of teaching dental health to grade-school children in the Beaverton School District.

Each winter term, senior students try their teaching skills on public elementary schools as part of their community education curriculum, according to Marge Empey, assistant professor of dental hygiene and instructor for the course.

"The overall purpose is for them to initiate, develop and present dental health education for a specific population," she said. "They have a captive audience with school children, and teachers and administrators are usually extremely receptive to having the students there."

Through a show-and-tell instructional style, the HSC students teach their young charges about brushing, flossing, use of disclosing tablets, the function of teeth, dental caries, periodontal disease, the re-

*Offering some tips on toothbrushing to a youngster at Beaver Acres Elementary School in Beaverton is Marcia Whittet, senior dental hygiene student at the UOHS. Miss Whittet is working with fellow student Christi Beck during the program of teaching dental health to grade-school children.*

lationship of nutrition to dental health, and the importance of fluoride. The older grade schoolers — some of them already wearing braces — learn about orthodontic care as well.

"The children get really excited about things like finding out what plaque looks like," said Ms. Empey. "Little kids get excited about comparisons between people's teeth and animals' teeth. They like to see the instruments that a dental office uses." Slides of dental x-rays also prove popular.

Because most grade schoolers already have heard quite a bit about dental health, Ms. Empey pointed out, the HSC students' efforts serve mainly to reinforce good dental habits.

Each dental hygiene student spends one-half day a week in the elementary schools, teaching a variety of age levels. The students work in pairs.

The grade-school program gives the dental hygiene students their first expo-



sure to teaching in the community — something they'll be called upon to do once they are professionals, Ms. Empey said.

"It's a lot less threatening to start with a class of, say, second graders than with adults," she added. "I try to ease them into it."



# HSC shares in search for new Primate Center chief

A search committee has been assigned the task of filling the shoes of Dr. William Montagna, who will retire May 1, 1981, after 16 years as director of the Oregon Regional Primate Research Center.

As principal investigator for the core grant that supports the Primate Center, Dr. Leonard Laster, president of the Health Sciences Center, is responsible for appointing a successor to Dr. Montagna. Dr. Laster, who selected the search committee, praised Dr. Montagna for his "outstanding and creative leadership."

"My task evokes mixed emotions," said Dr. Laster. "I shall miss the opportunity to have worked for a longer period with Bill Montagna — he is indeed one of a kind. However, I look forward to the opportunities that transitions in leadership provide for new insights, for resetting courses and for rethinking programs."

"I have named a search committee that draws upon the various constituencies that are deeply concerned with the future of the ORPRC," the HSC president said.

Chairing the search committee is Dr. James Metcalfe, professor of medicine at the UOHSC. He "has demonstrated through the years a genuine understanding of the singular value of the ORPRC as an outstanding national resource," Dr. Laster said.

Dr. John Kendall, professor and head of the HSC division of metabolism-nutrition, and Dr. Arthur Brown, professor and chairman of the School of Dentistry's department of physiology, are among the committee members. They are "accomplished investigators in the biomedical sciences," Dr. Laster said, who "fully appreciate the opportunity that exists to

bring the ORPRC and the UOHSC even closer together in research and teaching than ever before."

Representing the "fine tradition of high-quality research and the dedication that

*"The ORPRC is a superb center for experimental biology, and a closer tie to the Health Sciences Center could enhance the future scientific and educational development of both institutions."*

characterizes the ORPRC staff" are Dr. Nancy Alexander, HSC associate professor of obstetrics/gynecology and anatomy, and Dr. Robert Brenner, HSC professor of anatomy, both researchers in the ORPRC division of reproductive physiology. Dr. Alexander's alternate during her temporary absence this spring will be Dr. Oscar Portman, HSC professor of biochemistry and ORPRC researcher in nutrition and metabolic diseases.

Dr. Walter Lobitz Jr., HSC professor of dermatology, represents several worlds, said Dr. Laster. "He is not only a former UOHSC departmental chairman (dermatology), a well-loved teacher, a scholar and a clinician, but he is also a past president of the Medical Research Foundation

of Oregon, the organization that provides financial and administrative management oversight to the ORPRC with skill, dedication and great pride."

Dr. Laurens Ruben, "a distinguished immunologist and a devoted teacher" at Reed College in Portland, Dr. Laster said, "has worked with the ORPRC staff in the past and has the highest of hopes for its future growth."

Assisting Dr. Metcalfe with administrative activities of the search committee will be Donald Eckman, executive vice president of the Medical Research Foundation of Oregon.

"The charge to the search committee is to nominate an outstanding scientist with an international reputation and with skill in the administration of scientific research," Dr. Laster said.

In addition to his duties as director of the Primate Center, Dr. Montagna has served as professor of dermatology and professor and head of the division of experimental biology at the UOHSC, the Primate Center's host institution.

Dr. Montagna is one of 19 faculty people who hold joint appointments at the UOHSC and ORPRC. A dozen graduate students from the Health Sciences Center also carry on research at the Primate Center.

The two institutions collaborate in three main areas of research — reproductive biology, cardiology and immunology. Researchers also work jointly in behavior, surgery, cutaneous biology, pathology, and nutrition and metabolic diseases.

Located 12 miles west of the UOHSC on 260 acres rich in woods and wildlife, the Primate Center is one of seven centers in the United States established to advance biomedical knowledge through the use of nonhuman primates.

The Health Sciences Center provides the academic environment for the Primate Center's core staff and visiting scientists.

Said Dr. Laster, "I look forward to the years ahead with great enthusiasm. The ORPRC is a superb center for experimental biology, and a closer tie to the Health Sciences Center could enhance the future scientific and educational development of both institutions."

The president added that anyone with recommendations or comments for the search committee may contact Dr. Metcalfe or other committee members.

*Joel Ito, medical illustrator at the Oregon Regional Primate Research Center, drew this portrait of a baboon from the ORPRC's new colony. The baboons arrived from Kenya Nov. 30.*



## Speakers lined up for alumni meeting

Eleven prominent speakers, discussing a broad variety of topics, have been selected for the 65th annual scientific meeting of the School of Medicine Alumni Association April 16-18.

More than 400 graduates from throughout the United States are expected to return to the campus for the three-day session, according to Dr. Richard Hodgson, '56, alumni president and senior clinical instructor in otolaryngology at the UOHSC. He added a special invitation to all students, faculty and residents to attend the program.

Chairman of the annual meeting, Dr. Robert H. Gray, '55, alumni vice president and clinical assistant professor of medicine, announced the names of the alumni speakers.

They are Drs. Marc Bayer, associate director of emergency services; William Fletcher, head of the division of surgical oncology; Frederick Fraunfelder, '60, chairman of the department of ophthalmology; James Gilbaugh, '63; Stephen Miller, head of the division of plastic surgery; Samuel Newcom, head of the section of medical oncology; George Porter, '57, chairman of the department of medicine; and William Riker, chairman of the department of pharmacology.

Dr. William Montagna, director of the Oregon Regional Primate Research Center, has been selected as one of the Sommer Memorial Lecturers to be featured at the alumni meeting, according to Dr. Ernest Livingstone, '51, chairman of the Sommer Lecture Committee and clinical associate professor of medicine.

Other Sommer Lecturers include Dr. Jerome Becosse, chairman of the department of surgery, Sloan-Kettering Institute for Cancer Research, and Dr. David A. Pike, a diabetologist at Kings College Hospital, London.

A paper submitted by a Portland-area resident also will be included in the program.

Class reunions planned for the annual meeting include 1930, 1935, 1940, 1945, 1950, 1955, 1960 and 1965.

## Baboons aid humans in pregnancy research

The new nonhuman arrivals at the Oregon Regional Primate Research Center may help humans learn more about pregnancy and birth.

Shipped in from Kenya, the colony of 21 baboons — the first ever at the Primate Center — will provide new research models in studies that seek to understand more about late pregnancy, the onset of labor, and the birth process in primates.

The research is being conducted by Dr. Miles Novy, professor of obstetrics and gynecology at the Health Sciences Center and head of the division of perinatal physiology at the Primate Center.

One of every 13 babies in the United States is born too early, too small, or both. These babies have difficulty in handling vital body functions such as eating and breathing, and thus are more likely to be sick or die. A better understanding of the birth process, Dr. Novy said, would lead to the development of techniques

that will prevent premature labor and save the lives of many babies.

Since 1970, Dr. Novy and his co-workers have studied the birth process in rhesus monkeys. They pioneered techniques in fetal surgery that allow them to monitor vital signs of both the mother and fetus.

Now they will extend their studies to the baboon, using 18 breeding females and, eventually, their infants.

The endocrinology of both pregnant baboons and rhesus monkeys resembles that of pregnant women. However, the major advantage of the baboon in this research lies in its larger size. In particular, the larger size of the fetus will permit the placement of sensors to monitor vital functions, and will allow for more kinds of surgical procedures.

According to Dr. Novy, "The use of nonhuman primates as experimental models for problems in human pregnancy has been most helpful in providing answers to

many important biological and clinical questions. Ethical considerations limit experimentation in human fetuses, and there is increasing evidence that extrapolation of data from sheep or other experimental animals to humans may be unwarranted.

"Nonhuman primates, because of their closer biological relationship to man, provide appropriate or preferential experimental models in many areas. An understanding of the mechanisms that are involved in pregnancy and labor should improve the care of pregnant women and the quality of their unborn children."

During the baboons' 90-day quarantine, Dr. Novy and his co-workers are monitoring the animals' menstrual cycles in order to establish a breeding schedule. They also are training them to present their arms for venipuncture so that blood sampling for hormone levels can be done throughout the menstrual cycle and pregnancy.





Since she started the project a decade ago, Muriel Reeder (left) has created thousands of hero badges as rewards for brave young patients like the little boy at right.

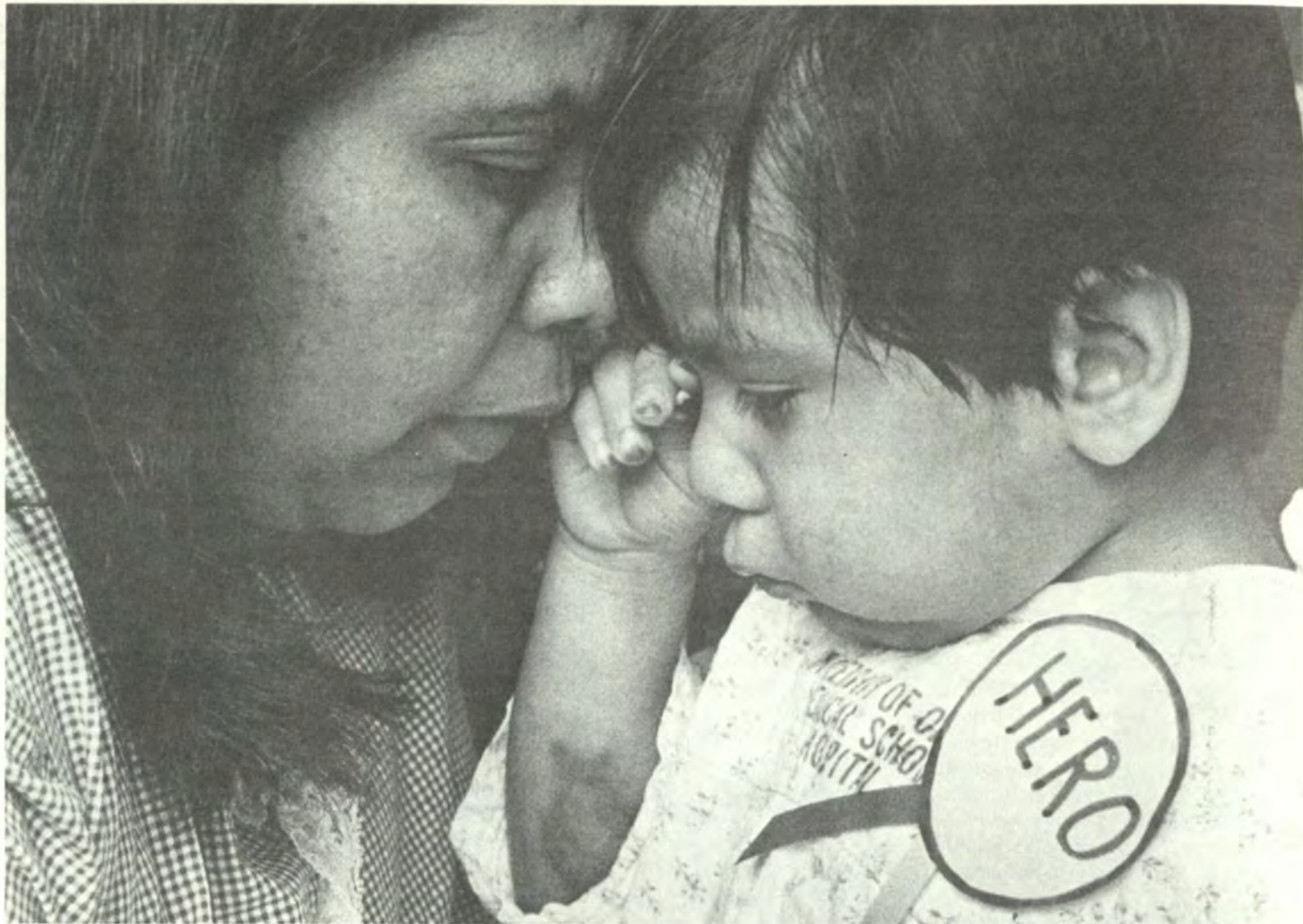
## Hero badges made with love

Behind every "Hero" badge in Doernbecher Memorial Hospital for Children, there are two heroes: the proud youngster who receives the badge for bravely enduring pain, and Muriel Reeder, a hospital volunteer who has been making the badges for 10 years.

Mrs. Reeder, who creates the badges with obvious care and attention to detail, commented, "As I work on them, I'm always wondering which little child will get this badge. I love being able to do something to make them happy. I'm proud to be a part of their getting-well process."

She made 6,000 hero badges in 1979 alone.

Mrs. Reeder has been friends with Emily Malaimare, pediatric recreation therapist for over 20 years. When Mrs. Reeder's husband died in 1969, Ms. Malaimare suggested she volunteer to make hero badges.



According to Ms. Malaimare, "About 10 years ago, a nursing student mentioned having seen an article about hero badges in a nursing journal. The staff thought it was a great idea."

The badges are used in pediatrics in the Outpatient Clinic, in Doernbecher Hospital, and in the ear, nose and throat clinic.

Ms. Malaimare explained that because some procedures are quite painful or frightening, even youngsters who cry can be awarded hero badges. "The kids are told they can cry all they want, just as long as they don't thrash around during the procedure."

Connie McLellan, former pediatric pa-

tient care coordinator in University Hospital, wrote an article on hero badges for the May/June 1977 issue of *Pediatric Nursing*. She explained that all procedures are carried out in the treatment room so that the bedside area remains a safe and restful place for the child.

Ms. McLellan pointed out, "(Hero badges) connote more than courage. A hero badge is a visible symbol that the

child has valiantly faced pain with all its attendant fear and anxiety... The child's individualism is acknowledged and tangibly recognized rather than being lost in the complexity of his medical and nursing care."

She added that the badges are a "source of friendly rivalry among roommates who try to see who has the most badges at the head of his bed."

## Retirements

Barbara Jacob

Thirty years of service to the Health Sciences Center came to a close in late December when Barbara Hiatt Jacob retired.

Her career began as a general duty nurse at the State Tuberculosis Hospital on Marquam Hill and culminated as assistant administrator of University Hospital and Clinics.

Mrs. Jacob also served as a clinical instructor in the School of Nursing from 1950 to 1953, and later moved from superintendent of the University State Tuberculosis Hospital to administrator in 1973. In 1974, she was named assistant administrator of University Hospital (north), and in 1975, she became assistant administrator of University Hospital and Clinics.

"She brought many perspectives to her job — that of registered nurse, instructor and administrator," commented Stan Urban, administrator of University Hospital.

"She provided stability to the hospital administration when we underwent organizational changes a few years ago. Her pleasant nature and loyalty proved to be a valuable asset to me during the inevitable ups and downs of this dynamic institution."

Although her career was a long and fulfilling one, Mrs. Jacob and her husband, Phil, are eager to begin touring the backroads of Oregon in their mobile home. They also hope to spend more time at their beach house.

Shortly after her retirement party, the Jacobs followed the sun to Hawaii for a

lengthy vacation.

Bernice Jones

For the first time in 44 years, Bernice Jones isn't actively involved in nursing. But those who know the woman whose dedication has been focused on pediatrics — particularly neonatal intensive care — doubt that she'll stay away for long.

Mrs. Jones retired Dec. 31 as associate professor and chairman of parent-child nursing.

Although she is "just enjoying being at home and catching up on things you never attend to while you're working outside the home," Mrs. Jones plans to remain immersed in Sigma Theta Tau (national honor society of nursing) while keeping up on activities of her HSC colleagues.

Mrs. Jones was graduated from the Emanuel Hospital School of Nursing and went on to earn degrees from the University of Oregon School of Nursing and the University of Washington. She joined the School of Nursing faculty in 1968 as an instructor in pediatric nursing.

With pages of nursing workshops to her credit, Mrs. Jones also was instrumental in developing the master's program in family-centered child nursing and the Play to Grow program for mentally retarded youngsters in conjunction with the Portland Parks Bureau.

Over the years, one of Mrs. Jones' greatest delights was to watch her nursing students, initially intimidated by the Neonatal Intensive Care Center, grow into confident professionals able to handle the most complicated neonatal care.

Mrs. Jones was honored at a retirement party at a Portland restaurant where she received, among other gifts, a sewing machine to assist in the many creative projects she'll now have time to complete.



Boning up for the upcoming All-Hill Talent Show are the Four Fossae, a barbershop quartet made up of second-year medical students (clockwise from upper left) Brad Hindman, Robin Downey, Dave Irvine and Bob Johnson. The annual show, spotlighting the various talents of students and other HSC people, is scheduled for Friday, Feb. 29, at 7:30 p.m. in the library auditorium.



# CCD helps educators help their handicapped pupils

Public Law 94-142 has brought millions of handicapped children — and some special problems for educators — into focus in the nation's public schools.

In effect for over two years now, the Education for All Handicapped Children Act required "free appropriate public education" for all handicapped youngsters. This goal was to be accomplished, wherever possible, by "mainstreaming" them into public schools alongside other children.

It's a laudable goal. But how does a teacher who is used to a class of nonhandicapped youngsters make a multiply handicapped, wheelchair-bound child fit in? How does a special-education teacher find ways for her mentally retarded pupil to mingle with "normal" students?

With the aid of a federal grant, the Crippled Children's Division is helping smooth the assimilation process for teachers and other public-school personnel. CCD is assisting school districts in fitting handicapped children into the most appropriate program in the "least restrictive environment."

Purpose of the two-year, \$88,000 grant is to provide in-service training for rural

educators serving the severely handicapped. The grant, which is up for renewal, is from the Department of Health, Education and Welfare's Bureau of Education for the Handicapped.

*"If the mainstreaming concept is going to work, then these people (school personnel) have to be trained to meet the needs of these children."*

(The program is conducted in cooperation with the Oregon Department of Education, the State Mental Health Division and local school districts.)

"If the mainstreaming concept is going to work, then these people (school personnel) have to be trained to meet the needs of these children," said Dr. Gerald Smith, associate professor at CCD and facilitator of the grant. "The more training they have, and the more expertise they develop, the more confident they will be and the more positive their attitudes toward working with handicapped children."

The grant offers a helping hand to edu-

cators and support staff who work with severely handicapped children in rural areas of Oregon. These are communities, Dr. Smith said, that lack sufficient professional services to carry out such programs on their own.

CCD's program takes on the challenge from four angles — transdisciplinary training, workshops, diagnostic/prescriptive classroom, and colloquia.

"The first component (transdisciplinary training) allows us to follow children who come through CCD back to their own communities," said Dr. Smith, "and to assist in training school personnel to carry out recommendations that our clinic staff makes."

Through this rural outreach training, CCD educators go right to the schools and give personal attention to teachers and other staff who need assistance. Typically, the trainer demonstrates how to deal with a handicapped student, helps work out an individual educational plan for the child, and identifies resources that can help.

In the past year, the rural outreach program trained 104 school staff serving 36 handicapped children ranging in age from 3 to 20. Twenty-six of those participants were teachers in regular classrooms; 25 were special-education teachers; 32 were administrators, supervisors and coordinators, and 21 were classroom aides and volunteers.

Workshops are another important way that the program gives rural educators the knowledge and skills to work with handicapped children.

Conducted by CCD faculty and staff at rural sites or at CCD, the workshops are tailored to the expressed needs of specific groups of educators.

The workshops tackle such topics as identifying and using community resources to serve the handicapped, managing the behavior of trainable mentally retarded children, adaptive physical education, and interaction between parents and professionals.

Goals of the workshops, Dr. Smith said, are to help educators feel more positive about working with severely handicapped children, develop individual educational

programs and carry out instructional strategies. The workshops have reached out to rural communities from Coos Bay to La Grande.

The third component of the program, the diagnostic/prescriptive classroom, brings rural educators to CCD for an in-depth look at developmental problems of children from their district who are served by CCD.

While the children take part in the classroom program and their parents attend educational and consultative sessions, the educators spend at least one day in the classroom program and in training sessions.

They emerge, Dr. Smith said, with a better knowledge of identifying developmental problems. They also learn how to identify agency resources, make referrals, write individual educational plans, and communicate better with parents of handicapped children.

Also helping educators get a handle on serving the handicapped is the program's final component, the colloquia, in which selected rural educators are invited to CCD for classes.

*Some of the CCD staffers who train rural educators in the program switch hats as participants in another grant program, the Liaison Educator Project.*

Staff for the program include Dr. Pearl Paulson, Judith Hylton, Christie Barkost, Carol Kutner and Sabra Bradshaw.

Some of the CCD staffers who train rural educators in the program switch hats as participants in another grant program, the Liaison Educator Project.

Also designed to help educators help the handicapped, the Liaison Educator Project is funded by a \$146,000 grant from the Oregon Department of Education.

CCD's liaison educators act as advocates for school personnel in both urban and rural areas in their transactions with CCD. Their activities include gathering preclinic information about handicapped children from schools, determining the schools' concerns, seeing that school concerns are addressed during clinics, and involving school personnel in clinic evaluations.

The liaison educators interpret complex medical reports into language the schools can understand, and they translate CCD recommendations into educational goals for the children. They're also called upon to help with individual educational plans for handicapped youngsters.



*As part of CCD's rural outreach training program, Judith Hylton (center) helps a special-education teacher at a Clackamas County junior high school work with a student who has cerebral palsy. The program allows CCD educators to go right to the schools of teachers who need assistance.*

## Successful mainstreaming means seeing students' strengths

A child with cerebral palsy wheels into a classroom of youngsters who can walk, talk and write normally.

It's a new world for him; always before he has been cloistered in a special classroom with other handicapped kids. And it's a new experience for the teacher; she has never had a handicapped pupil in her class.

With the right program choices, attitude and preparation, says a staff member of the Crippled Children's Division, this kind of experience can be fulfilling instead of frustrating for everyone involved.

Through Public Law 94-142 — which ensures free appropriate education for all handicapped children "in the least restrictive environment" — some youngsters are being served comfortably in a normal classroom with the help of special methods, materials or equipment or assistance from an aide, said Dr. Pearl Paulson.

Others can spend part of the day in a regular classroom and part in a resource room or therapy session. Still others need to be in a special classroom most of the day but can join their nonhandicapped peers for such activities as art, music, movies, recess, lunch and assemblies.

Just as children's handicaps and personalities differ, said Dr. Paulson, so do the

approaches to mainstreaming children.

"Very often," she said, "we will be trying to help teachers include a handicapped youngster in their regular classroom in such a way that it works for the benefit of all the kids and isn't an unnecessary load on the teacher. This is extremely individualized. It usually involves

*"We can't go out and make one-minute cures. But we can go out and demonstrate or explain some strategies, keeping in mind that in most ways, a handicapped child is normal."*

finding out what the youngster's strengths and weaknesses are and how the specific teacher organizes her classroom."

Dr. Paulson is one of four educators at CCD who spend some of their time working one-to-one with teachers in their schools as part of CCD's rural outreach transdisciplinary project (see accompanying story).

As they help teachers carry out CCD recommendations, they often share skills and ideas for teaching handicapped students who have been mainstreamed into regular

classrooms for at least part of the school day.

"We can't go out and make one-minute cures," Dr. Paulson noted. "But we can go out and demonstrate or explain some strategies, keeping in mind that in most ways, a handicapped child is normal."

"It is important to focus on their similarities to other children and not be distracted by their differences. It is important that handicapped children be able to interact — and feel esteem — with their 'normal' peers," Dr. Paulson emphasized.

Just because a child is in a wheelchair doesn't mean he automatically should be shunted to the back of the class.

And if his poor physical coordination causes his paper to slide around when he writes, the problem is not insurmountable. Perhaps he can learn to anchor the paper with a weight, or a classmate can help him tape the paper to his desk.

Dr. Paulson said that in a physical education class, game rules or equipment can be adapted slightly so that a handicapped youngster can participate without feeling like a drawback.

"You try to find out where the child can be most normal, most like the other kids, and make sure they have chances to interact in those situations," she said. "Suc-

cessful mainstreaming largely depends on the ability to see the strengths of the youngster and to use them."

For example, a trainable mentally retarded child may spend most of her school day in a resource room with a special-education teacher. But maybe she's handy with scissors, and could take part in a social studies lesson in the regular classroom by cutting out pictures for the bulletin board.

"I think that good teachers very often pick this (adaptive teaching) up themselves because they meet every kid that way — looking for their strengths and what areas they need to develop," said Dr. Paulson. "In many ways, good mainstreaming is just good teaching."

With CCD's help, many educators apparently are overcoming their uneasiness about teaching handicapped children.

"There are many educators who certainly have been initially dismayed but have very quickly become excellent teachers for their handicapped youngsters," said Dr. Paulson.

"And a lot of the teachers really are willing to follow our suggestions. Much of what we pass on to teachers are things we've learned from other teachers who have met similar problems and have come up with some good solutions."



# HSC researcher looks into what's behind No. 1 killer

February is American Heart Month.  
And Dr. Don Layman is among  
scientists at the University of Oregon  
Health Sciences Center  
whose research could touch many  
American hearts.

Its symptoms don't develop until after the disease has progressed for many years. It is the chief cause of death in the United States and Western Europe.

The culprit is atherosclerosis.

In working to uncover the body's secrets about how atherosclerosis develops, Dr. Don Layman, UOHSC researcher and assistant professor of medicine and anatomy, hopes his studies will lead to methods of prevention and treatment.

While the early events in the development of atherosclerosis are the focus of Dr. Layman's research, the characteristics of the disease, once it's diagnosed, are well known.

Atherosclerosis, a progressive disease affecting the major arteries of the body, is characterized by localized thickenings of the artery lining that accumulate large amounts of connective tissue, cholesterol and lipids.

"If these thickenings become severe enough, and occur in arteries to the heart or brain," Dr. Layman said, "they can restrict blood flow to these organs and cause heart attacks or strokes."

One of the initial events in the development of these thickenings is the localized multiplication and accumulation of an arterial cell called a smooth muscle cell. Over many years these cells slowly multiply and accumulate in the lining of arteries, forming a visible bulge into the lumen (the arterial cavity). This thickening or plaque may eventually grow until it occludes blood flow through the vessel.

"Several hypotheses have been proposed to explain why the arterial smooth muscle cells multiply and accu-

mulate in the lining of arteries," Dr. Layman said. "One theory suggests that these thickenings are a result of a reaction to injury, and that the accumulation of smooth muscle cells and connective tissue proteins in the lining of arteries represents a form of scar tissue.

"Another theory suggests that cells in atherosclerotic lesions arise by mutation or transformation of a single arterial smooth muscle cell, which then divides and produces many similar cells that behave somewhat like benign tumor cells. Evidence exists to support both theories."

## Commencement to feature national science leader

(continued from page 1)

In 1964 Dr. Handler coauthored a widely used textbook, "Principles of Biochemistry," now in its sixth edition.

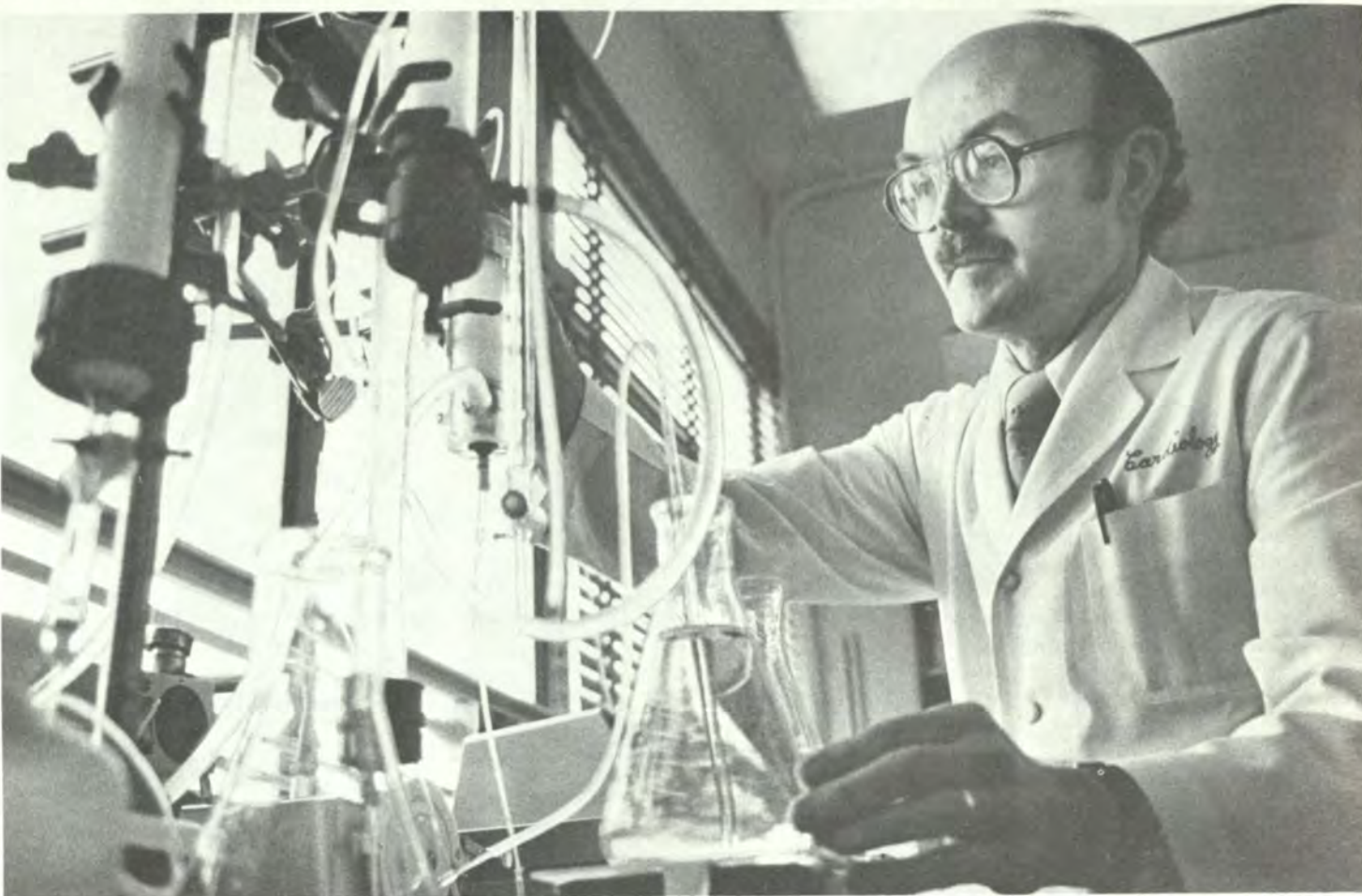
Dr. Handler has been active in scientific and public policy since 1951, when he accepted the first of a series of government advisory appointments. Among his many positions have been president of the American Society of Biological Chemists; chairman of the board of the Federation of American Societies for Experimental Biology; and chairman of the National Science Board of the National Science Foundation.

He has served on the President's Science Advisory Committee under two Presidents; diverse panels, study sections and councils of the National Institutes of Health; and the President's Commission on Heart Disease, Cancer and Stroke.

Dr. Handler has received numerous honors, awards and special lectureships and has been decorated by three foreign governments. He holds honorary degrees from 26 colleges and universities.

"I am especially pleased," said Dr. Leonard Laster, HSC president, "that Dr. Handler has accepted our invitation to be the commencement speaker. I know we all hope that during this next decade, our University will rededicate itself to aspiration toward excellence; toward the productive blending of basic research, clinical care and education; and toward clear and precise communication with the lay public whom we serve and upon whose understanding of our missions we depend."

"Dr. Handler, both in his personal career as a biomedical scientist and as an author of outstanding books and articles, and in his position as president of the National Academy of Sciences, is virtually the embodiment of all our aspirations. I cannot imagine a more fitting speaker for our first commencement of the 1980s."



Using a carboxymethyl cellulose column, Dr. Don Layman isolates different collagens by ion exchange chromatography. The researcher is particularly interested in the role of collagens, connective tissue proteins, in the development of atherosclerosis.

The reaction-to-injury hypothesis gains support, Dr. Layman said, from the relative composition of two types of connective tissue proteins, called collagens, in these thickenings.

While normal arterial tissue is composed of 30 percent type I collagen and 70 percent type III collagen, atherosclerotic plaques show almost the reverse: 65 percent type I and 35 percent type III collagen. The latter composition is typical of scars, Dr. Layman noted.

"Moreover, these thickenings commonly form in areas of arteries where stress or injury to the artery lining is most likely to occur," he said. "This injury could be caused by bacteria, chemicals or drugs circulating in blood."

Dr. Layman proposes that smooth muscle cell multiplication and the overproduction of collagen in atherosclerotic lesions of man result from repeated injury to the artery lining in areas of stress, followed by too much exposure of the smooth muscle cells to normal circulating blood growth factors and lipids.

Because collagen formation accompanies smooth muscle cell multiplication and growth in lesions as they develop, the researcher said, the blood components that promote cell multiplication may also stimulate collagen production in these cells.

To test his ideas, Dr. Layman has established human arterial smooth muscle cells in culture. He studies the effect of the different blood components on cell multiplication and collagen synthesis by growing smooth muscle cells in the presence of specific blood components.

Dr. Layman and his colleagues have found that when smooth muscle cells are grown in serum from patients with high

cholesterol and triglycerides, the cells are stimulated to multiply and produce type I collagen, the main type of collagen in atherosclerotic lesions.

On the other hand, when cells are grown in human serum containing low amounts of cholesterol, they produce more type III collagen, typical of normal arteries.

"We have also found that the higher the cholesterol in the growth medium, the greater the accumulation of cholesterol in the cells," said Dr. Layman. "However, cholesterol can be removed from smooth muscle cells by a specific serum component called low-density lipoproteins."

As part of his atherosclerosis research, Dr. Layman is interested in finding out why diabetics show a propensity toward premature and severe atherosclerosis.

"We are studying to determine whether there is a diabetic 'factor' which promotes cholesterol uptake, cell proliferation and increased collagen synthesis," said Dr. Layman. "We're looking for factors in diabetic blood that may promote these events."

Dr. Layman's research is supported by two grants from the National Institutes of Health: \$185,000 for "Collagen Synthesis by Cultural Human Vascular Cells," and \$196,000 for "Angiopathy in Diabetes Mellitus." He also has received grants from the Oregon Heart Association.



DR. PHILIP HANDLER  
president of National Academy of Sciences

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