



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.

Teamwork key in the successful delivery of quints

While Abraham Lincoln's birthday may be cause for a national holiday, the birth of quintuplets, also on February 12 and the first ever at University Hospital, will long be remembered by all involved.

Teamwork was the key factor in the successful delivery, according to attending obstetrician Dr. Kenneth Burry, associate professor of obstetrics and gynecology in the School of Medicine.

The babies' birth was 12 weeks ahead of schedule and began in the early hours of the morning when doctors detected a separating placenta at 3:30 a.m. Dr. Burry was notified at 4:30 a.m. that the quint's birth was imminent and by 6:30 a.m., he and 35 physicians, nurses, anesthesiologists, and respiratory therapists were at the hospital preparing for the Cesarean section birth.

"Delivery began at 7:28 a.m. and was completed by 7:30 a.m.," said Dr. Burry. "The teamwork involved made the delivery a smooth one."

One five-person team was assigned to each baby upon delivery with support personnel lending aid. Two of the babies breathed on their own immediately while the others had to be given breathing assistance. Each of the children weighed less than two pounds and measured about 14 inches in length.

The entire three-room delivery area and some of the medium-risk nursery were used in the birth and respiratory support for the quint. Upon becoming stable, the infants were taken in transport incubators from North Hospital to the Neonatal Intensive Care Center (NICC) in University Hospital South. Within two hours, all five babies (25 percent of the NICC patient capacity) were observing their new surroundings.

Dr. John Yount, assistant professor of pediatrics and perinatal medicine in the School of Medicine and an attending pediatrician at the birth, said, "Although teamwork is a daily necessity in the NICC, the birth of the quint was most impressive. The absence of any one of the people who participated in the delivery could have made the difference in our success."

Born to David and Vivian Potter of Portland, three of the five babies have survived. Initially designated as babies "A", "B", "C", "D", and "E", the Potters named their children the first week following the birth. The names, in order of birth, are: Trisha Jean, Cheryl Ellen, Kenneth Jason, Alan Michael, and Brian Quentin. Quentin means "fifth born."

Trisha, seemingly the strongest of the children, died on February 17 of cerebral hemorrhage. Alan, who had been the sickest of the babies, died one week after birth after a sudden cardiac arrest.

Of the three remaining quintuplets, Dr. John Reynolds, director of the NICC and professor of pediatrics in the School of Medicine, said, "The long-term outlook is quite good, yet they will not be considered off the critical list until life-support systems are no longer needed and their weight gain is steady."



If the quint continue to improve, they will probably leave the hospital within the first two weeks of May, near what was their full-term delivery date of May 7. Statistics compiled by Dr. Gerda Benda, associate professor of pediatrics and perinatal medicine, show that 80 percent of the infants who leave the NICC have no serious residual complications.

Statistics also show that the survival rate

of very small premature infants in Oregon has risen dramatically in the last 10 years as the expertise, personnel and facilities needed for care of high-risk infants have been developed. In 1970, of 124 premature infants born in Oregon weighing less than 1000 grams (two pounds, 3 ounces), only eight survived. By 1979, the outcome of these very small infants had much improved so that 45 out of 173 survived.

Vivian Potter, mother of the quintuplets, holds two of her "bundles of love", Cheryl and Brian, in the medium risk nursery. The two babies were moved there March 23. The Potters are looking forward to the day they can take their children home to their own nursery. The babies will probably be able to leave the hospital within the first two weeks of May.

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Scientific scholar selected to speak June 12



Longtime publisher of *Scientific American*, Gerard Piel, will be the featured speaker at the June 12, 1981 commencement ceremony, according to President Leonard Laster

Noted for his outstanding contributions toward the public's understanding of science, Mr. Piel was formerly science editor for *Life* magazine before joining *Scientific American* in 1947, a publication recognized as the best general science magazine for the lay public.

GERARD PIEL
commencement speaker

A recipient of 11 honorary degrees, Mr. Piel has also accumulated numerous awards and prizes in recognition of his literary efforts in helping man to understand the fundamental meaning of scientific activity. Among the awards he has received are the 1973 Rosenberger Medal, awarded by the University of Chicago, and the 1979 Henry John Fisher Award from the Magazine Publishers Association.

In 1961, Mr. Piel authored *Science in the Cause of Man* followed by the *Acceleration of History* in 1972.

A trustee for Radcliffe College, Phillips Academy, the American Museum of Natural History, New York University and the Mayo Foundation among others, Mr. Piel is also a member of the American Academy of Arts and Sciences, the American Philosophical Society, the Institute of Medicine and the Council of Foreign Relations.

Murdock grant funds UOHSC long-range plan

The HSC's first long-range institutional plan is being developed. The plan will set goals and establish the direction for the Center's development and growth in the next 10 years.

A \$200,000 grant from the M.J. Murdock Charitable Trust is providing funding for the activity that will "clarify the mission of the university, identify a specific set of institutional goals and objectives and establish a means for continued planning."

President Leonard Laster pointed out that the HSC has never had a long-range planning statement and that such a statement is "an internal obligation to our faculty, students, staff and patients."

"External groups also require such a document," President Laster said. "As we continue to form a closer working relationship with the private sector for the

added margin of support that will allow achievement of excellence, it becomes imperative that our approaches to private supporters be logically conceived and well prepared. Potential donors often require such information before they will consider requests for funding."

Because the HSC currently has no staff personnel whose sole responsibility is institutional planning, a Portland based consulting firm, working in collaboration with various faculty planning committees is assisting in developing the long-range plan.

The objectives of the Murdock funded grant are:

- to outline a general program statement for the next decade.
- to develop a series of reasoned and comprehensive program proposals.
- to clarify the HSC's basic goals and

needs to itself, to the legislature, to the public at large, to the private sources whose collaboration and help the HSC invites, and to the array of other constituencies it serves.

- to obtain support for, and begin the implementation of, the most urgently needed programs.

- to enhance the ability of the HSC faculty, staff and friends to engage in rigorous and meaningful planning and in accountable implementation and ongoing modification and updating of such plans.

- to strengthen the HSC's managerial credibility with the agencies of government that oversee the institution.

"Institutional planning will help establish the HSC as a genuinely unified university dedicated to the rigorous preparation of well-trained health professionals rather

than as a loose confederation of separate schools," said President Laster.

"For the HSC to meet the future successfully, comprehensive planning is essential," he said. "The long-range goals of the planning grant and the HSC's growing partnership with the private sector will provide the means to overcome the consequences of numerous years of underfunding."

The Murdock Charitable Trust was created by the will of M.J. (Jack) Murdock who is the late co-founder of Tektronix, Inc. The Murdock will specified that the Trust property is to be "used, administered and distributed exclusively for religious, charitable, scientific or educational purposes."

HSC staff share in the excitement of the quintuplets' birth

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The Potters were aware from ultrasound studies that they would have quintuplets. The detection of the quintuplets at five weeks gestation was the earliest in medical history. Previously, the earliest diagnosis of multiple pregnancy was at eight weeks. While Dr. Burry had hoped Mrs. Potter would be able to carry the babies until at least 32 weeks gestation (40 weeks is the normal length of time for a full-term baby), he was pleased that at least 28 weeks were completed. Mrs. Potter spent the last six weeks prior to the birth in University Hospital in order that her condition could be closely monitored.

"In babies this size, every day makes a difference," said Dr. Burry. "Twenty-six weeks would have been the absolute minimum length of time. The extra weeks added to the quints' chances of survival."

Mrs. Potter has been a patient of Dr. Burry's for five years. She was referred to Dr. Burry because of his work in the infertility clinic which is part of University Hospital's obstetric/gynecology clinic. Dr. Burry counseled them on the pros and cons of fertility drugs and on the 10 percent chance of multiple pregnancy with fertility drugs.

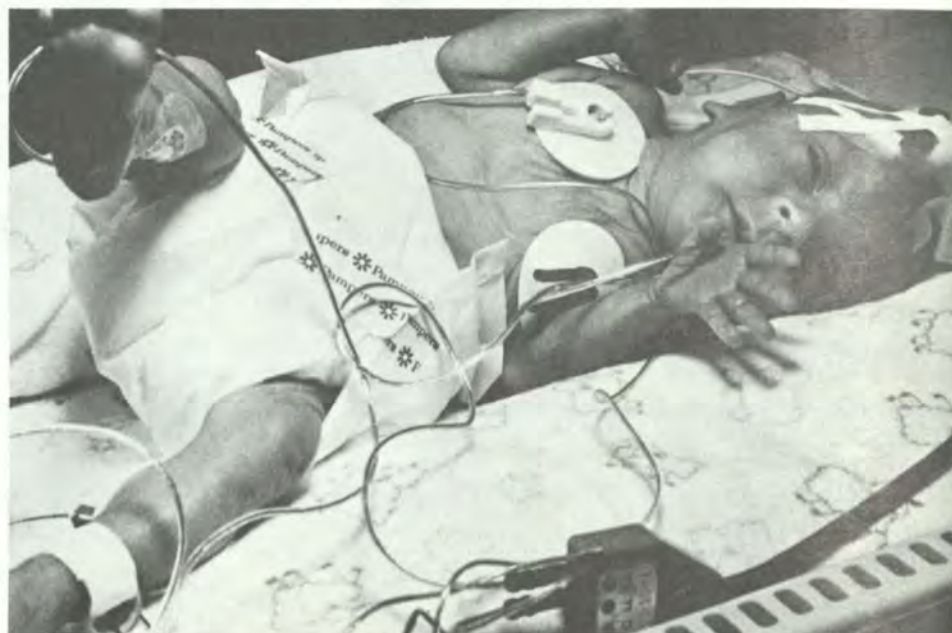
"I wanted the Potters to be aware of the consequences and the decisions they would have to face in the event of multiple births," stated Dr. Burry.

Because of the extensive counseling the couple received and their early knowledge that they would probably be the parents of quintuplets, the Potters had an opportunity to pre-plan some of the events surrounding the birth. Something they wanted to avoid was publicity — for themselves and their children.

Mr. and Mrs. Potter did not reveal their identity to the public until February 27, two weeks and one day after the birth of the quints. In a written statement released through the Office of University Relations, the Potters said that they were "confident at this time that our remaining babies — Cheryl, Kenneth and Brian — will have the strength to continue and survive. We also feel that we can cope with the pressures of public interest resulting from people knowing who we are."

The Potters asked to "remain anonymous up to this point because we wanted to enjoy the experience of pregnancy, childbirth and the arrival of our babies without any outside pressures, just like any average couple. Our full concentration on our babies' survival is more important to us than having them publicized or us publicized."

Now, more than a month after the birth of the quints, the Potters are eagerly looking forward to bringing their children



Third-born quint Kenneth Potter, in Neonatal Intensive Care Center at the time of this photo, continues to improve and gain weight steadily. Doctors anticipate that he will be joining his brother and sister in the medium-risk nursery within several weeks.

home. They agree that they would not be able to enjoy this time without the help of many people at the HSC.

"From the beginning of our efforts to have children, to their birth, and now as we wait for their release from the hospital, people have continued to show their concern and support for us. Dr. Burry has never failed to supply us with answers to our many questions. Through his thorough research, he has made our dream of having children a reality," said Mrs. Potter.

Asked if her six-week stay in the hospital was boring, Mrs. Potter replied unhesitatingly, "No! I had known that a prolonged stay in the hospital would be part of my pregnancy so I was mentally prepared for it. The nurses and doctors were just super to me and they have

shared in our excitement."

Of the round-the-clock care provided in the NICC since the babies' birth, the Potters have only praise.

"Without the constant care and attention of the nurses and doctors in the NICC, we could not be confident that in a few weeks our own nursery will be home to our babies," said Mrs. Potter.

The Potter quintuplets are the second set of quints to be born in Oregon. The first quints were born to a Washington couple in 1973 at Bess Kaiser Hospital.

In 1975 sextuplets were born at Bess Kaiser Hospital.

There have also been two sets of quadruplets born in Portland, one in 1946 at Multnomah Hospital and the other in 1964 at Portland Adventist Medical Center.

HEALTH SCIENCES CENTER NEWS

Vol. 10, No. 2
March/April, 1981

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Dr. Anthony A. Pearson, professor emeritus of anatomy, School of Medicine, dies

Dr. Anthony A. Pearson Jr., professor emeritus of the School of Medicine department of anatomy, died March 16 in a Greenville, South Carolina, hospital. He was 74.

He was chairman of the department of anatomy from 1953 to 1970 and continued to teach and research here while serving as a visiting professor at several other institutions.

Before coming here in 1946, Dr. Pearson taught anatomy at the University of Chicago, Loyola University and Baylor University.

While in the department of anatomy, Dr. Pearson pushed for integrating both clinical and basic science components during the students' freshman year, according to Dr. Robert Bacon, professor of anatomy and colleague of Dr. Pearson's for 17 years.

"He was way ahead of his time in that

respect," he added.

In addition, Dr. Bacon said, "His research on cranial nerve development had great scientific impact and his papers on the subject are considered classics."

Dr. Pearson was selected in 1965 by graduating medical students for the Allan J. Hill Teaching Award.

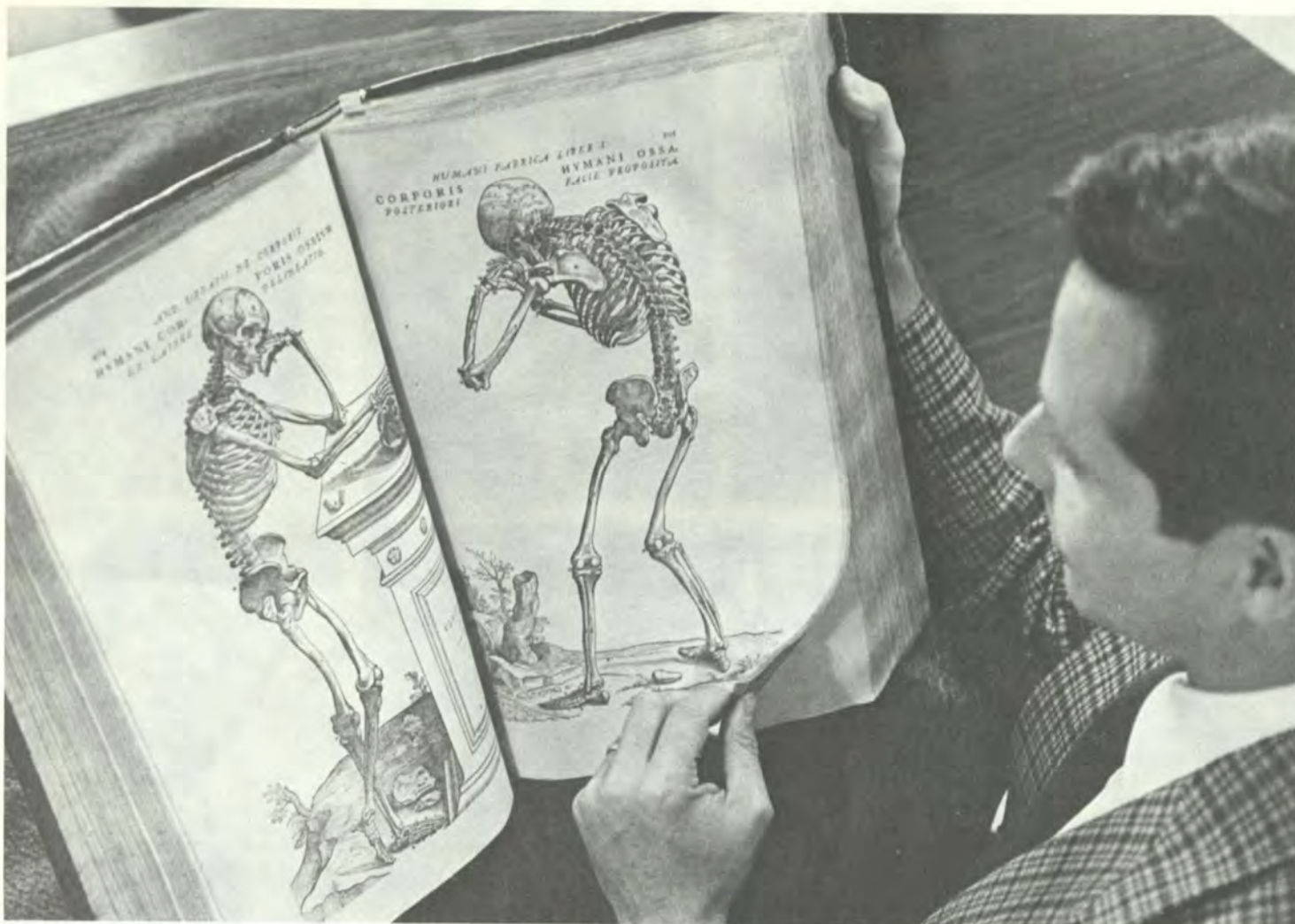
"He earned his students' respect by trying to improve the educational process, incorporating their ideas at a time when that wasn't common practice," said Dr. Larry Rich, assistant professor of ophthalmology and a student of Dr. Pearson's in 1966.

A native of Greenville, Dr. Pearson graduated from the Furman University in that city. He earned his master's degree and doctorate in anatomy from the University of Michigan.

He is survived by three sisters, all of Greenville.



DR. ANTHONY A. PEARSON JR.



The highlight of National Library Week, April 6-10, was the viewing of the second folio edition of Vesalius' *De Humani Corporis Fabrica*, published in 1555. It was on display along with other rare medical books in the HSC Library History of Medicine Room. The Vesalius' book, recently donated to the HSC by a former student, Dr. Norman J. Holter of Helena, Montana, contains some of the first anatomical illustrations ever printed. Italian authorities considered dissections of humans illegal in the 1500's so Vesalius acquired bodies for his research and illustrations in a number of ways, including grave and gallows robbing. Vesalius, a descendant of a long line of scientists, was named professor of surgery at the University of Padua in Italy at age 23. He also taught anatomy. *De Humana Corporis Fabrica* is one of 3,000 books in the Library's rare book collection.

Technology and tradition housed in library

Computers rush requests to readers

The HSC Library is now offering its patrons more resources than ever before with the aid of several computerized networks.

With these systems, HSC faculty, staff and students plus physicians, nurses and dentists throughout the state have access to information and publications housed anywhere in the United States or in numerous foreign countries as well as in the HSC Library. Three computer systems now connect the HSC Library with the National Library of Medicine and nearly every major health science library in the country.

"Not only can money be saved by sharing resources, but considerable time is saved when requests for inter-library loans can be filled within days or weeks as op-

posed to months which it formerly took," said Jim Morgan, director of the HSC Library.

Through special terminals, the HSC Library accesses OCLC, Inc., a system it has used for the past three years. Sheila Osheroff, catalog librarian, compares it to "ordering telephone or banking services at home." The OCLC database now contains cataloging information for nearly seven million volumes and their locations worldwide. Not only can catalog cards for a book be ordered simply by pushing a button, but any of the 2,000 other libraries using OCLC can be asked via the terminal to send an item on inter-library loan.

"Since the system also automatically refers the request for our user to five consecutive libraries and keeps track of it until the item is returned to the lending library, the paperwork saved is tremendous. As for saving time, compare this to sending the request through the mail," Mr.

Morgan stated.

Another system, MEDLINE, which stands for Medical Literature Analysis and Retrieval System Online, is a computerized literature retrieval service connected with the National Library of Medicine. It includes information on articles published in over 3,000 medical, nursing, dental and other health related journals. A library user can request a search on a subject and get a computer printout of information about articles written on that topic. The library patron can then decide if he wants to read the article and, if it is not available at the HSC Library, request it from a library which owns it, often on OCLC.

A third computer-based system is PHIL-SOM (Periodical Holdings in the Library of the School of Medicine), which contains information on journal collections at major medical libraries in the country. Based at Washington University in St.

Louis, it allows the HSC Library to input information about its journal collection of 2,466 titles and receive monthly listings of them which can be placed around the library and elsewhere. The lists allow library users to conveniently and quickly check to see what the library owns.

Community hospitals' libraries aided

A National Library of Medicine three-year grant of \$231,000, awarded to the HSC Library, has helped to strengthen networking efforts of health sciences libraries in Oregon.

Begun in August 1978, the Oregon Health Information Network (OHIN) is described by Steve Teich, OHIN coordinator, as a "cooperative venture undertaken with the support of the Oregon Health Sciences Libraries Association to provide superior library services to Oregon's health care professionals through development of, and reliance on, community hospital libraries.

"OHIN's major responsibilities are to assist individuals who would otherwise be unserved and to support local hospital and health sciences libraries," Mr. Teich explained.

Jim Morgan, HSC Library director and principal investigator for the grant, points to a doubling of the number of hospital libraries in the state — from 21 to 43 — during the grant period as evidence of its success.

"The hospital library provides a convenient one-stop access point for a health care provider in need of information," stated Mr. Morgan. "Yet, if the information is not available at the hospital's library, it can now be sought by the hospital library manager through a network of health sciences libraries across Oregon, including the HSC Library.

"This network, in turn, is part of a nationwide library network which allows even the most isolated practitioner access to such significant research collections as those at the University of Washington and the National Library of Medicine," he said.

Through the efforts of Mr. Teich and two other grant-funded coordinators located in La Grande and Eugene, new library personnel in hospitals as small as 22 beds have been assisted and trained in establishing and maintaining their libraries.

Communications between health sciences libraries in Oregon have also been strengthened through a newsletter, while collections have been developed using gifts and exchanges of materials from one library to another.

"The next step," according to Mr. Teich, "is to increase the number of hospital library consortia, in order to meet local and regional needs in a cost-effective manner."



Good news! Fourth-year medical students Rick Pittman and JoDeanne Bellant on Match Day, March 18, learned of their residency assignments along with the rest of their 114-member class. Mr. Pittman is assigned to surgery at Seattle's Swedish Hospital. Ms. Bellant will remain at the HSC in pediatrics. Match Day is considered by most medical students to be as important an occasion as commencement. The entire School of Medicine's fourth-year class was placed in residencies by mid-morning.

New text 'enriches, enchants'

Dr. Bradley Harlan, associate professor of surgery, Dr. Albert Starr, professor of surgery and chief, division of cardiopulmonary surgery, and Fredric Harwin, medical illustrator and formerly supervisor of medical graphics at the HSC, have co-authored *Manual of Cardiac Surgery, Volume I*. The book is the first full-color atlas of cardiac surgery and represents the first time a major, international publishing house has granted coauthorship to a medical artist.

A March 5 review in the *New England Journal of Medicine* described the manual as "a delight in presenting things that are not normally noticed. Its credo is that 'the best surgeons do not make fast moves... they make efficient moves.' Accordingly, even 'the way a needle is placed in the needle holder, the way the needle holder is held in the hand, and the motions of the hand, wrist, arm, ...' are detailed. Such attention to these essential components of technical excellence is rare. It will thus stimulate even those already familiar

with cardiovascular suture lines to analyze further their own surgical motions."

Released last summer by Springer-Verlag, the *Manual of Cardiac Surgery, Volume I*, is the first of a two volume series which is specifically designed to present current operative techniques and explore various aspects of diagnosis and treatment.

The text includes exhaustive coverage of basic surgical techniques; large, detailed full-color illustrations of integral steps in surgical procedures and numerous schematic charts and photographs clarifying pre-, intra-, and postoperative status.

Volume I of the series will soon be published in German with other languages to follow. Volume II is planned for release this summer.

In summing up *Manual of Cardiac Surgery, Volume I*, the *New England Journal of Medicine* review stated, "This world-class atlas establishes new norms. It settles contentious questions without fuss. It will enrich and enchant all who read it."

Seven recent appointees are looking forward to the challenges that lie ahead in their new roles at the HSC. Each brings an expertise that will strengthen programs within central administration, University Hospital and the Schools of Medicine and Nursing. Clockwise, far left to right: Peter Wollstein, Charles Williams, Dr. Caroline White, William Collins, Dr. Gazi Abdulhay, Dr. Neville Vines, Maureen McGuire.



Appointees fill positions on "the hill"

UOHSC appointments

PETER WOLLSTEIN

Peter C. Wollstein has been named assistant vice president, budget and finance, of the HSC. He was previously director of budget at Washington State University.

In announcing Mr. Wollstein's appointment, Dr. James McGill, HSC vice president for finance and administration, said that the newly created position was part of the reorganization of the office of finance and administration.

Mr. Wollstein looks forward to the challenges of his position which he describes as three fold. "The first challenge," he said, "is to provide guidance in the formulation of financial information systems at a level characteristic of the complexity and diversity of the UOHSC.

"Secondly, to develop a capability for more sophisticated financial analysis to support better decision making.

"And, thirdly," he continued, "to provide guidance in the development of timely and credible budget data to internal and external constituencies."

As assistant vice president, budget and finance, Mr. Wollstein will be responsible for coordinating budgetary, fiscal operating and fiscal information systems. He is responsible for the budget, accounting, and research services offices.

Mr. Wollstein earned his M.B.A. degree from Mankato State University in Minnesota and a B.B.A. degree from the University of Minnesota.

CHARLES WILLIAMS

Charles Williams has been promoted to the position of media relations officer for the HSC. He has served as assistant media relations officer since March 1980.

In his new role, Mr. Williams will develop news stories as well as respond to requests from the news media for information regarding educational programs, scientific and research achievements and clinical care advances at the HSC.

A native of Connecticut, Mr. Williams earned his master's degree from the Medill School of Journalism at Northwestern University. He received his B.S. degree at the University of Rochester.

Before joining the HSC, Mr. Williams served as director of public information and education at the University of Rochester Cancer Center in New York. He has written a variety of articles as a free-lance

writer on medical and health related topics for magazines and newspapers.

Mr. Williams is involved in both community and professional organizations including the Oregon Donor Program, American Cancer Society, and Health Educators and Practitioners Association.

University Hospital appointments

WILLIAM COLLINS

William Collins has been appointed new associate hospital director for outpatient and emergency services at University Hospital. He formerly served as administrator of the Emergency Medicine Center for the UCLA Hospital and Clinics. While in Los Angeles, Mr. Collins was also involved in community emergency planning, paramedic training and in the administration of ambulatory care programs for Los Angeles County.

In his new position, Mr. Collins will serve as administrator of the approximately 75 outpatient clinics at University Hospital including the hospital's emergency services. Last year, the clinics handled more than 140,000 patient visits and the emergency room had 34,000 patient visits. The emergency department also provides the state's only full time advanced paramedic and emergency medical residency programs, along with the Oregon Poison Control and Drug Information Center, which handled 24,000 poison calls from all over the state last year.

Mr. Collins earned a master of public administration and health services administration from the University of Southern California and a bachelor of arts degree in public health education from Stanford University. He is a member of the American Public Health Association and a nominee in the American College of Hospital Administrators.

DR. GAZI ABDULHAY

Dr. Gazi Abdulhay, a specialist in the diagnosis and treatment of women with cancers of the reproductive organs, has been appointed chief of the gynecology oncology service for University Hospital. He will also serve as an assistant professor of obstetrics and gynecology in the School of Medicine.

A native of Turkey, Dr. Abdulhay came to the United States in 1972 after earning

his medical degree from the University of Istanbul. Since that time, he has specialized in the field of gynecologic oncology through an internship and residency at Rush-Presbyterian Medical School in Chicago, a one-year fellowship at Georgetown University in Washington, D.C. and two years of fellowship training at the Irvine Medical Center in California.

School of Medicine appointments

MAUREEN MCGUIRE, DR. NEVILLE VINES

Maureen McGuire, assistant professor of obstetrics and gynecology in the School of Medicine, is the new director of the Oregon Program for Sexual Health. She was previously assistant director of the program.

The Oregon Program for Sexual Health, previously called the Oregon Program for Reproductive Health, has a three-fold mission as an educational resource for medical, nursing and other HSC students in sexual and reproductive health; as a community educational program for practicing physicians and other professionals dealing with sexual health; and as a research arm to identify needs for education and program development in sexual health at the HSC and throughout Oregon.

Ms. McGuire is a Ph.D. candidate in communications at Rensselaer Polytechnic Institute in Troy, New York. She received her master's degree in educational communication from New York University and a bachelor's degree in communications from the State University of New York at Stony Brook.

She was an associate in the department of psychiatry at Albany Medical College, New York, training psychiatrists and psychologists.

New associate director of the Oregon Program for Sexual Health is Dr. Neville Vines, a licensed psychologist in private practice who will participate part time.

Dr. Vines is an associate professor in the department of obstetrics and gynecology, associate clinical professor in the department of psychiatry, and lecturer in medical psychology at the HSC.

He holds a Ph.D. degree from the University of Pennsylvania, where he received the 1974 doctoral award for research in sex education for medical students.

Dr. Vines was formerly director of education and program development in the division of family study, department of

psychiatry, at the University of Pennsylvania School of Medicine, and administered the Center for the Study of Sex Education in Medicine there.

The Oregon Program for Sexual Health began in 1979 with a grant from the Keller Institute of the Medical Research Foundation of Oregon. It is especially concerned with issues related to the psychology and social aspect of human sexuality, birth control, and pregnancy.

School of Nursing appointments

DR. CAROLINE WHITE

Caroline McCoy White has joined the School of Nursing as chairperson of the community health nursing department.

Dr. White comes to the HSC from the University of Maryland School of Nursing where she was an associate professor in the graduate program in community health.

Dr. White received her Ph.D. and M.P.H. degrees from Johns Hopkins University.

"I was attracted to the HSC School of Nursing because of its emphasis on integrating teaching, research and clinical practice," Dr. White said. "It's an approach that is talked about widely, but actively supported here."

Dr. White is continuing as a co-investigator in two research projects begun in Maryland: "Assessment of Anxiety and Tension Management Behaviors in Families" and "Survey to Determine Continuing Education Needs of Nurses in a State Health Department."

Dr. White said that she looks forward to being involved with the soon to be renamed department of community health care systems, as it continues to evolve and grow as a vital force in the health of the community.

"We have a particular responsibility to educate undergraduate and graduate students in providing preventive care to populations within the community in such areas as occupational and school health, in services to the elderly, and to conduct research in these areas," she said.

Dr. White is a member of the American Association of University Professors, American Nurses Association, and the American Public Health Association.

Foreign visitors exchange knowledge face-to-face

Since the Middle Ages, when the first universities were founded and long before the advent of the scientific journal, academicians have left their home institutions for brief periods of time to travel to another scholarly place for a face-to-face exchange of knowledge.

Today, professional publications line library shelves, filled with an abundance of ready information on the latest developments in every possible field of academic endeavor. Yet the tradition of the visiting professor lives on.

Any institution that does not welcome visiting professors or send out such is doomed to mediocrity

Said Dr. Ransom J. Arthur, dean of the School of Medicine, "Very often, important features of technique and analysis, which may be difficult to understand from the laconic written work of a scientific article, are made clear during a lively symposium or a private conversation. Any institution that does not welcome visiting professors or send out such from its own faculty is doomed to mediocrity."

At the HSC, a recent count listed the presence of 13 "transmitters of knowledge" representing six different countries, on hand to stimulate, provoke, encourage

and learn at the School of Medicine and the School of Dentistry.

From Australia, on a sabbatical leave from the Royal Children's Hospital in Melbourne, came cardiac surgeon Dr. D'Arcy Sutherland at the invitation of Dr. Albert Starr, professor of surgery and head of the division of cardiopulmonary surgery. Dr. Sutherland has been instrumental in the development of a computer bank that will give the HSC a valuable tool in the research of past congenital heart cases.

Also from Australia are Dr. James Butler and his wife, Dr. Gail Littlejohn, here until December. Dr. Butler is working as a research fellow with Dr. John Hanifin, associate professor of dermatology, on a research study of histamine in patients who have atopic dermatitis (eczema). Dr. Littlejohn, an assistant professor of anesthesiology, is involved in resident teaching and patient care. Her particular fields of interest are regional, obstetric and cardiac anesthesia.

From the University of Gothenburg, Sweden, are Dr. Inga-Lisa Strannegard, a pediatric allergist, and Dr. Orjan Strannegard, an immunologist/virologist. The Drs. Strannegard, internationally known experts in atopic dermatitis, will spend the year in dermatology research working with Dr. Hanifin.

Dr. Kefei Kang, a dermatology professor from Shanghai, is another visiting profes-

sor working with Dr. Hanifin.

Dr. Hidekatsu Matsumura, assistant professor of neurosurgery at Nagasaki University School of Medicine, is initiating the histochemical study of the endothelium of atheromatous plaques with Dr. Reid Connell, associate professor of anatomy in the School of Medicine, and is also continuing the work of two colleagues who preceded him to the HSC, Dr. Hirohisa Ono and Dr. Keisei Tanaka. Dr. Ono, associate professor of neurosurgery at Nagasaki, left HSC after a three-month stay to return home, but will return in June to join the School of Medicine's neurosurgery faculty as associate professor. Dr. Tanaka, a resident under Dr. Ono, has returned permanently to Nagasaki. The three Japanese neurosurgeons are researching carotid artery disease.

Visiting professors are also bringing new perspectives and challenges to the School of Dentistry.

Dr. Yih Wei-Yung brings to the HSC a background that is highly unusual even in Chinese medicine. A specialist in oral pathology as well as oral and maxillofacial surgery, Dr. Yih is vice head of both the oral maxillofacial surgery and plastic surgery department and of the oral pathology department at Nanking Stomatologic Hospital. At the School of Dentistry, Dr. Yih's special interest is in the management of complex oral diseases. Here for one year,

Dr. Yih hopes to extend his visa to study advanced plastic techniques with the School of Medicine's department of surgery.

From Syria comes Dr. Emile Azar, chairman of the department of operative dentistry at Damascus University dental school. Drawn to the HSC by the reputation of the School of Dentistry's department of dental materials science, Dr. Azar is doing research under the supervision of Dr. David Mahler.

Dr. Julio Lossio, visiting associate professor from the University of Sao Paulo in Brazil, was also attracted to the HSC by Dr. Mahler's reputation. When his sabbatical leave ends in June, Dr. Lossio expects to have gained new insights in teaching and research that might be used in Brazilian dental education.

Said Dr. Louis Terkla, dean of the School of Dentistry, "Visiting professors from foreign countries bring to us an international flavor. They make excellent social and cultural contributions to our daily lives which often become somewhat routinized in the American stereotype."

"Although many of them come here to study and learn from us," Dean Terkla continued, "we invariably learn a great deal from them. Further benefits are gained by having the opportunity to enhance the esteem for our school among other schools throughout the world."

Bill stuffers: a patient explanation for patient accounts

University Hospital's Patient Accounts Office (PAO) sends out more than 25,000 bills per month. Until recently, the PAO staff received phone calls from patients who did not understand how to read their bills.

With a new bill stuffer created jointly by PAO staff and hospital administration, the billing process is explained entry by

entry. The stuffer was first used in December 1980.

University Hospital centralized its accounts receivable operations in April 1976. The centralized patient accounts office, located in the Telco Building downtown, sends out statements monthly which include charges for inpatient, outpatient and ancillary services. Unpaid charges

from previous months are shown on a "balance forward" basis.

"To reduce costs, more and more of the larger teaching hospitals are converting to consolidated inpatient and outpatient billing systems. By eliminating the practice of a separate billing for each occasion of service, the hospital saves money and the patient receives only one statement per

month," said Lauris Rodier, assistant fiscal director for patient support services.

Although patients will get a single monthly bill from University Hospital, they may also get a separate bill from University Medical Associates for services provided by staff physicians, surgeons, anesthesiologists, pathologists and radiologists.

In the short time that PAO has used the new stuffer, there has been a 15 percent reduction of calls asking for explanation of the billing statement.

"PAO staff were answering approximately 650 calls a month from people with questions about the statement," said Ken Justice, acting director of the patient accounts office. "Since we began sending the stuffers, there have been 100 fewer calls each month."

The stuffer is now being sent on a quarterly basis, but Mr. Justice said that it may soon be mailed monthly.

The PAO uses other bill stuffers on a rotating basis. These stuffers inform patients that University Hospital accepts certain credit cards, and explain the two bills patients may receive, either from the hospital or University Medical Associates.

| RETURN | | THIS PORTION WITH PAYMENT PAYABLE TO UNIVERSITY HOSPITAL | | | |
|--|---|--|---------------------------------|--------|--------|
| | | DATE | DESCRIPTION OF ACCOUNT ACTIVITY | AMOUNT | TOTAL |
| Date on which service was provided or other transactions processed | Description of service provided or other transactions processed | INPATIENT SERVICES: | | | |
| | | BALANCE FORWARD | | | |
| | | | TOTAL INPATIENT SERVICES | 180.00 | 180.00 |
| 2318324-0605L2018 | 1 06/03/80 | OUTPATIENT SERVICES: | | | |
| | | BALANCE FORWARD | | | |
| | | | LIMITED EXAM-ESTABLISHED PT | 463.85 | |
| | | | TOTAL OUTPATIENT SERVICES | 18.00 | 481.85 |
| | | | TOTAL AMOUNT DUE | | 661.85 |
| THESE CLAIMS AND OTHER ACTIONS ARE PENDING ON YOUR ACCOUNT: | | | | | |
| 3 699 2 000000 | 03/25/80 | OTHER INSURANCE | 8.50 | | |
| 5 345 2 012180 | 03/25/80 | CONTINENTAL ASSUR | 98.23 | | |
| 1 699 1 051280 | 04/27/80 | OTHER INSURANCE | 180.00 | | |
| 0 200 2 052480 | 05/14/80 | MEDICARE | 52.50 | | |
| 2 699 2 000000 | 05/14/80 | OTHER INSURANCE | 0.00 | | |
| 0 200 2 062180 | 06/03/80 | MEDICARE | 18.00 | | |
| 1 699 2 000000 | 06/03/80 | OTHER INSURANCE | 0.00 | | |
| | | | 357.23 | | |
| FOR THESE DATES OF SERVICE, THE BALANCE IS YOUR RESPONSIBILITY: | | | | | |
| 1 025 2 031980 | 02/27/80 | BALANCE DUE FROM YOU | 304.62 | | 304.62 |

A descriptive replica of a statement mailed with each patient's bill, illustration to the left represents only a portion of that sent, has taken the puzzlement out of paying.

School of Nursing's gerontology track focuses on "frail elderly"

According to statistics, elderly people represent the fastest growing population segment in the country.

Responding to the country's new demographic shift, the School of Nursing initiated a new track, the gerontology program, within the school's medical/surgical major. The track focuses on the care of chronically ill elderly with special attention directed to those Dr. Patricia Archbold, program director and associate professor in the School of Nursing, describes as the "frail elderly."

Three students are enrolled in the gerontology program, which was initiated in the fall of 1980. A five-year plan has

been outlined to gradually implement the flexible track into the other existing majors of mental health nursing, community health care systems, and family health.

"The old-old in our communities are the most vulnerable to problems of ill health and frailty," said Dr. Archbold as she explained the crucial need for the School of Nursing's gerontology program. "Chronic health problems rather than acute pre-dominant in this age group. These chronic problems involve physically and socially disabling consequences. Historically, our society has not addressed the problems of this vulnerable group effectively."

Funded by a grant from the United States Public Health Services, the new gerontology project is also developing gerontological content for incorporation in the undergraduate curriculum.

"With few exceptions, all nurses work with older people," said Dr. Archbold. "Consequently, all nurses need certain aspects of gerontology content."

As the track continues to develop, Dr. Archbold intends for the program to accomplish three objectives: "First, to prepare nurses at the master's level in depth in selected areas of gerontological nursing.

"Second, to facilitate clinical gerontolo-

gical nursing research. There are many common problems of older people, 'wandering behavior', for instance, that we know little about.

"Third, to provide services to the nursing community with planned educational programs and consultation services.

"The focus of this program," added Dr. Archbold, "is on the application of theory and research to clinic nursing practice which is responsive to the problems of daily living encountered by the elderly and their families, including such problems as prevention of crisis, management of regimens, normalizing social relations, and obtaining adequate resources."

33 years at HSC, Gale Rankin retires until next snowfall

Gale Storm Rankin, director of nursing services for University Hospital, has retired after 33 years of employment with the HSC.

Although Mrs. Rankin's official last day of work was January 30, she will probably not be gone longer than the next snowstorm. Living within walking distance of the HSC, Mrs. Rankin has already volunteered to help out when bad weather slows the nursing staff in its progress up Marquam Hill to the hospital. Throughout the years, she has been counted on to be the first to arrive and begin passing breakfast trays, making beds and answering phones when inclement weather struck.

Mrs. Rankin began her career as a staff nurse at Multnomah Hospital in 1948, became a head nurse in 1950 and was named assistant director of nursing in 1954. In 1955 she served as administrative housekeeper for the hospital. From 1955 to 1975 Mrs. Rankin was director of nursing for Multnomah Hospital. When the hospital merged with University Hospital, she became director of nursing for University Hospital (including North and South hospitals, and Doernbecher Memorial Hospital for Children).

Born in Klipson Beach, Washington, Mrs. Rankin originally planned to work in elementary education. She graduated in 1941 from Mount Angel Normal School and taught public school for one year at Mark's Prairie. But Mrs. Rankin had always held an interest in nursing so she returned to school and received her nursing diploma and B.S. degree from the HSC School of Nursing in 1948.

Mrs. Rankin said that her work at the HSC has been "rewarding and fun."

"I feel very fortunate to have worked in such a great place," she said. "I have had an extremely supportive staff, several of whom I have worked with for 25 years."

Staff comments on Mrs. Rankin mention her optimism, trust, sense of humor, confidence in her staff and her ability to listen and to understand.

Mrs. Rankin was named "Boss of the Year" in 1975 by the American Business Women's Association Pacific Wonderland Chapter. The nomination form by nurse's aide Anna Fry stated that her "complete dedication to the welfare of patients has earned the highest respect of not only her staff, but physicians, administrators, educators and other community leaders."

Mrs. Rankin twice received awards of appreciation for distinguished public service from Portland Public Schools.

More than 300 people attended the retirement reception held for Mrs. Rankin on January 27. In her retirement, she plans to catch up on hobbies that have been put aside for work such as cooking, gardening, sailing, fishing, camping, reading, and spending time with her Weimaraner dogs. Mrs. Rankin hopes to take several barefoot windjammer cruises along with enjoying other forms of travel.

Mrs. Rankin has been a member of the University of Oregon Medical Board since 1977; member of the disaster committee from 1971 to 1981; member of the University Hospital Electronic Data Processing Steering Committee since 1976; and, since 1980, the Capital Construction Planning Committee. Since 1975 she has been director of nursing services for the Western Division Council of University Hospitals.

She holds many memberships including the American Nurses Association and Deans of Schools of Nursing to the Portland Committee on Foreign Relations, the Council on Foreign Relations and the National Association of Retired Persons.



GALE STORM RANKIN
Retired director of nursing services

Retiring longtime employees plan to golf, garden and tango

Several longtime UOHSC employees retired recently to find they have more time to spend on favorite hobbies, from gardening to dancing.

Barbara ("Brownie") Burnham, an obstetrical nurse and assistant director of nursing service for pediatrics and obstetrical nursing, retired February 1981. She had worked at the HSC since 1951.

A 1948 graduate of the School of Nursing, she acquired the nickname "Brownie" while living in the nursing dorm with nine other Barbaras. Her last name was Browne, and thus to avoid confusion she was dubbed "Brownie."

Mrs. Burnham plans to start golfing, in

addition to remodeling her kitchen, gardening and "finally putting away the Christmas things."

Her husband, Irvin Burnham, works in maintenance at the HSC physical plant.

Tom Bennett's work was his hobby, so it's no wonder the former groundskeeper is taking advantage of the spring weather by working in his yard.

Mr. Bennett, who retired January 1981 after working here 25 years, also plans to take up drawing and painting.

Although he also is landscaping his yard, James Graham, groundskeeper for 24 years, spends much of his time dancing. He used to be a dance instructor and now

practices on his own dance floor at home.

"I do the tango, the rumba, the twist—all the old timer stuff," said Mr. Graham, who may come back to work occasionally to earn extra money. He retired January 1981.

Lesta Godfrey, an administrative assistant in the department of pathology, School of Medicine, for 15 years, retired December 1980.

Estelle Hale worked here for 15 years in many positions, including ward clerk in University Hospital and the Outpatient Clinic, admitting clerk, and as clerical specialist. She retired December 1980.

Also retiring in December was Jose-

phine Lattanzie, who served as an administrative assistant in the department of public health and preventive medicine for 15 years.

Mary McEntire, an R.N. in the Outpatient Clinic and University Hospital for 18 years, retired January 1981.

A custodial worker in housekeeping since 1974, Hazel Hall retired December 1981.

Ruby Pugh worked for housekeeping in Mackenzie Hall and the Basic Sciences Building until her January 1981 retirement.

Newsmakers

Dr. William Howard, professor and chairman of the fixed prosthodontics department in the School of Dentistry and editor of *General Dentistry*, a publication of the Academy of General Dentistry, has received the Golden Pen Award, Division I, in the 1981 International College of Dentists Journalism Awards Competition. The award was presented March 9 at the American Dental Association Journal Conference in San Diego. Dr. Howard has been editor of *General Dentistry* for the past six years.

Karen Lahd, a third-year nursing student at the HSC, has been appointed by Governor Vic Atiyeh to the Statewide Health Coordinating Council. Duties of the council include giving policy direction for the state planning network and approving state applications for federal health funds. Ms. Lahd teaches first aid and cardiopulmonary resuscitation classes for the American Red Cross, and is a member of the board for the Red Cross Instructor's Association. Ms. Lahd will represent the Eastern, Northwest and Western Health Systems Agencies on the council. Her term expires October 23, 1982.

Dr. Arthur N. Wiens, professor of medical psychology in the School of Medicine, is the first recipient of the Raleigh Hills Foundation's John R. Montague Research Award. Dr. Wiens co-authored with Dr. Montague the hospital network's first research study. The study revealed the results of the Portland Raleigh Hills Hospital's treatment program and has stimulated similar research at other Raleigh Hills Hospitals.

Dr. Miles R. Markley, clinical professor of restorative dentistry at the University of Colorado School of Dentistry and a member of the post-graduate faculty at the HSC School of Dentistry, will receive honorary fellowship in the Academy of General Dentistry (AGD) at the academy's 1981 annual meeting. AGD's honorary fellowship is awarded to individuals who have made outstanding contributions to dentistry. Throughout his 52-year career, Dr. Markley has done extensive work in redefining the conservative amalgam restoration, the preventive ultraconservative fissure restoration, and pin retention for complex amalgams. He has lectured at nearly every dental school and major dental meeting in the United States. In addition to receiving honorary fellowship, Dr. Markley will serve as a clinician for AGD's 1981 scientific sessions program on July 21, presenting the 1981 Albert L. Knab Memorial Lecture, "Current Concepts in Restorative Dentistry."

Pam Hellings, associate professor of parent/child nursing and director of nursing continuing education at the School of Nursing, was recently given special recognition by *Pediatric Nursing* for her contributions to that journal. Citing Ms. Hellings and other professionals who have served as contributors and reviewers of manuscripts, the publication wrote that "because of their efforts, *Pediatric Nursing* is better able to provide its readers with timely, theoretically accurate, clinically applicable and readable articles."

Dr. Keith W. Harless, a 1972 graduate of the School of Medicine, has been elected to fellowship in the American College of Physicians (ACP). Representing internists and related specialists, the ACP works to upgrade the quality of medical care, education, practice and research. Dr. Harless

has been a resident of Bend for the past three years and is on the staff of the St. Charles Medical Center and the Bend Memorial Clinic.

Dr. David B. Mahler, chairman of the department of dental materials science in the School of Dentistry, was invited to speak at the International Congress of Dental Materials held in Merida, Venezuela, January 26-31. The topic of Dr. Mahler's presentation was "Clinical Research on Dental Restorative Materials."

Dr. James E. Lindemann, professor of medical psychology and Crippled Children's Division, is president-elect of Division 31 of the American Psychological Association (APA). Division 31 deals with the relations between the national body and the state divisions of APA.

Dr. Carol Howe, associate professor of family nursing in the School of Nursing, recently completed her doctoral training at the University of California, San Francisco, and is now the only doctorally prepared midwife in Oregon and one of approximately thirty in the United States. Dr. Howe's dissertation dealt with the subject of psychosocial maturity and adolescent sexual behavior and attitudes.

Sophomore dental student Lyle Nelson was selected by the School of Dentistry's Research Committee to represent the School of Dentistry at the 17th annual Dental Students Conference on Research held March 22-24 in Chicago, Illinois.

Governor Vic Atiyeh has reappointed Dr. Donald England, a 1947 graduate of the School of Medicine, to the state Board of Medical Examiners for a four-year term. Duties of the board include administering the state Medical Practices Act and pre-

scribing the rules and regulations pertaining to the practice of medicine in Oregon. The board examines, licenses and registers graduates of medicine and osteopathic schools and investigates violations of its rules and regulations and those complaints of known violations of the Medical Practices Act. A resident of Eugene, Dr. England has been in private practice and a hospital staff member at Sacred Heart General Hospital and Eugene Hospital since 1953.

Dr. Catherine Smith, professor emeritus of otolaryngology and currently working at the Kresge Hearing Research Laboratory, received the Annual Award of Merit of the Association of Researchers in Otolaryngology at the winter meeting January 20. This award is given for contributions to research in otolaryngology. Dr. Smith has done extensive research in identifying the chemical composition of the two different fluids in the inner ear and on the kinds of innervation serving the receptors of the inner ear. Dr. Smith worked at the HSC from 1969 to 1979.

Dr. J. Richard Raines, a 1949 graduate of the School of Medicine, has been elected president of the Medical Research Foundation of Oregon. The foundation provides support to biomedical research in Oregon. Dr. Raines, a resident of Portland, is a private consultant in radiology.

Dr. Richard Weleber, assistant professor of ophthalmology and medical genetics in the School of Medicine, has been elected chairperson of the Oregon Commission for the Blind.

Dr. Weleber is beginning his second two-year term on the seven-member commission board which determines policy for the agency serving Oregon's legally blind people.



Focus on people: hospital food service

It takes 125 "key people" to perform the soup to nuts tasks that keep University Hospital marching on its stomach.

"A lot of interaction between a lot of people makes it happen," said Arthur Fortuna, food and nutrition service director. "I consider each of our 125 part and full-time employees to be key personnel."

Approximately 3,500 meals are prepared each day in the food service kitchens to be delivered directly to patients or served to staff and visitors; a process that lines the service's larder with a constantly rotating inventory that involves the purchase of over \$70,000 worth of food stuff and supplies each month.

Time was, when cooks and pot scrubbers shared shifts on a thirteen-hour day to turn the larder's inventory into piping-hot meals ready to be served three times a day.

Then, in 1977, the system was changed, allowing personnel to prepare and store

flash-frozen entrees in a room-sized freezer ready for instant, microwave heating in the twelve auxiliary food centers strategically scattered throughout the hospital nursing units. "freeing our cooks and preparation people to work a single shift," Mr. Fortuna added.

The new food preparation system also put the tray assembly line on an eight-hour day. "Tray line is a demanding, largely unsung job," Fortuna said, "and a key position. If we didn't have the tray line, we wouldn't feed patients. It's as simple as that."

Some of Mr. Fortuna's key people rarely come near the slicing and dicing part of the food operation. Instead, as highly trained professionals they are involved in the decisions that determine who will eat what, while others carry through on the paper work that insures that the appropriate diet order ends up on the correct patient's tray. "We have eight clinical dieti-

cians on our staff," Mr. Fortuna said, "aided by additional diet and nourishment personnel."

Is it true what they say about too many cooks spoiling the broth? "Not so, at University Hospital," declared Mr. Fortuna. "Our main objective is to maintain high quality food and service. Our 125 key people make that so."

1. Lyla Eichstadt, head cook and a 15-year employee. 2. Virginia Hollow, R. D., chief clinical dietitian, discusses a patient's requirements with a R.N. 3. Ted Mistler, in charge of the storeroom pulls staples for Deanne Carlisle, production center manager. 4. Sue Woodbury, R.D., director of patient food services, checks the tray line at Lorraine Christner's station. 5. Arthur Fortuna, University Hospital's food and nutrition service director.



New argon laser treatment used to lighten serious birthmarks

"Port wine" hemangiomas (birthmarks) and other serious skin lesions on the face are being treated with argon laser by physicians in the School of Medicine. Physicians in the department of otolaryngology first used the argon laser in June 1980 for dermatology treatment.

"The argon laser appears to lighten the coloring of the blemish and to improve the sponginess and irregularities of the blemished skin more effectively than other forms of treatment," said Dr. Alexander Schleuning, chairman of the department of otolaryngology and maxillofacial surgery, and one of the HSC physicians currently administering the argon laser treatment.

Birthmarks and lesions have been treated by radiation, surgical removal, or freez-

ing the area with dry ice or carbon dioxide. Tattooing has also been used as a temporary camouflage of these blemishes.

"We have now abandoned these types of treatment because they are either ineffective or create a deformity that is nearly as bad as the hemangioma itself," explained Dr. Edwin Everts, associate professor of otolaryngology and maxillofacial surgery. Radiation carries the risk of causing skin or bone cancer, while the other methods may create large scars.

Hemangiomas are abnormal collections of blood vessels beneath a layer of normal skin. The dense network of vessels represents the remainder of extra blood vessel tissue present during the first month of fetal life.

"When the light of the argon laser hits red tissue, it is absorbed and released as heat energy, thus cauterizing or coagulating the blood vessels in the hemangioma," said Dr. James Smith, associate professor of otolaryngology and maxillofacial surgery. "The birthmark disappears after laser cautery, leaving a lighter area that may eventually resemble the skin's natural color."



Photo left shows a patient with an extensive facial birthmark. The exhibited cheek portion has been dramatically lightened with argon laser by School of Medicine physicians in the department of otolaryngology. The remaining "port wine" hemangioma areas on the patient's face are yet to be treated.

Newsmakers

(continued from page 6)

Niclaus H. Marineau, a Washington County dentist and a 1957 graduate of the School of Dentistry, has been named to a four-year term on the seven-member state Board of Dental Examiners by Governor Vic Atiyeh.

Dr. Nancy Alexander, director of the Infertility Laboratory/Sperm Bank and professor of anatomy, obstetrics/gynecology and surgery at the School of Medicine, has been named to the National Advisory Research Resources Council of the National Institutes of Health (NIH). A major function of the council is to review applications for NIH grants to fund general clinical research centers, primate research centers, laboratory animal resources, biotechnology resources, general biomedical institutional support for comprehensive research programs, and minority biomedical research support programs. Dr. Alexander is the author and coauthor of over 90 scientific papers, concentrated mainly in the field of reproductive physiology. She is also a reproductive physiologist at the Oregon Regional Primate Research Center.

Noted researcher inspires young investigators

In a way, Dr. Howard Mason is much like the elemental molecule to which he has devoted his life's work. For nearly 30 years, this professor of biochemistry has been as important to the scientific understanding of oxygen as that molecule is to human life itself.

"Much of this basic knowledge of how oxygen supports life is fundamental to understanding the body's functioning, and therefore medicine," said his department chair, Dr. Richard Jones. He explained that the basic work pioneered by Dr. Mason in the mid-1950's is still being expanded upon exponentially by him and his generations of students as well as co-workers and investigators around the world.

Dr. Mason's work has brought international recognition and awards, including the 1973 Gordon Medal from the International Society for Pigment Cell Biology and a Commonwealth Fellowship to Cambridge University in 1970. Currently, he is working under a five-year, \$600,000 grant from the National Institutes of Health to support his oxygen research. Other major grant support is from the National Science Foundation, the American Cancer Society and the Oregon Heart Association.

Oxygen is at the heart of respiration in all cells, so that understanding oxygen is essential to understanding how respiration supports life. Although this subject has been studied literally for hundreds of years, it has only recently been found that cells must "breathe" oxygen to produce the energy that is needed for cell function.

This subject — called "bioenergetics" — is a core part of first year basic science for medical students. Many major killing diseases are caused by lack of oxygen in tissues which result in insufficient energy for tissue functioning and survival.

For example, a lack of oxygen in heart cells (myocardial hypoxia) causes death of those cells, known as myocardial infarction. A lack of oxygen in brain cells quickly causes death of those cells, that is, stroke. So, finding out how to help oxygen-deprived tissues survive and maintain their essential functions is one of the major contemporary research areas of scientific medicine.

Dr. Mason's most basic research discovery, which occurred in the mid-1950's at the UOHSC revealed that oxygen is incorporated directly into living matter during respiration. This was a new insight because previously everyone believed that oxygen was converted to water or to hydrogen peroxide.

Related discoveries were subsequently made in many other laboratories. Over 150 enzymes which catalyze these newly discovered reactions, called "oxygenases" or "mixed function oxidase," were found. They function in every area of metabolism, from the biosynthesis of amino acids, fats, and carbohydrates, to the metabolism of vitamins, hormones, drugs, and other

compounds. A powerful effort is now being made by many researchers worldwide to understand how these oxygenases work, and how they are regulated.

Dr. Mason, as chairman of a subcommittee of the Committee on Nomenclature of the International Union of Biochemistry, is helping to create the new language for these enzymes.

The enzyme which controls oxygen consumption by heart muscle and all other respiring tissues is called cytochrome c oxidase, subunits of which have been separated in Dr. Mason's laboratory with Dr. Daryl Winter, former postdoctoral fellow, Nick Grinich, research assistant, and Genny Winterscheid, research assistant, probably for the first time in native form.

This discovery makes it possible to analyze the function of cytochrome c oxidase and to understand the relationship between the structure of the subunits and their functions, in binding of oxygen, conversion of oxygen to water, and conservation of the energy of the combustion reaction in biologically useful form.

Medical student research fellows will soon try to reconstitute cytochrome c oxidase from its native subunits, which will give new insights into the way the enzyme is assembled, and the role of each subunit. Dr. Basant Bhandari, who has just joined the laboratory after completing his Ph.D. at the University of Adelaide, will also participate in this phase.

Another enzyme system of great interest being pursued by Dr. Mason has both beneficial and harmful functions. The cytochrome P-450 liver enzyme system utilizes oxygen to break down drugs and other foreign substances for ultimate excretion, but the enzyme system also activates some foreign substances, such as the compounds in cigarette smoke, to become powerful cancer-causing chemicals.

Dr. Mason and former postdoctoral fellows, Dr. Y. Hasimoto and Professor T. Yamano, made the first observation of the enzyme with an electron paramagnetic resonance spectrophotometer, an instrument which determines magnetic properties of molecules. The result provided data which led ultimately to a deep insight into the structure and reaction mechanism of this important enzyme. Work is currently continuing on this system with Drs. Y. Nishimoto, former postdoctoral fellow, and Harriet Tobias, postdoctoral fellow, to find out, among other things, how the oxygen is transferred from the enzyme to the pre-carcinogenic molecules to make

them become active carcinogens. This work was recently boosted at the UOHSC by a \$150,000 grant by the American Cancer Society.

Interestingly enough, Dr. Mason, Dr. Stephen Morse of the department of microbiology and immunology in the School of Medicine, and Dr. Walter Bruyninckx, former postdoctoral fellow, showed that oxygen itself is a mutagen at body concentrations, and may be — ironically — the ultimate atmosphere carcinogen.

Research has established that oxygen-activated carcinogens bind to DNA so that the genetic message of the DNA may become altered. If the cells in which this occurs fail to correct the errors, the next generations of cells reproduce them with subsequent transformation of normal cells into cancer cells.

This work on the carcinogen-DNA reaction, carried out largely in Madison, Wisconsin, and in London, is one of the great recent successes in the attempt to understand chemically-generated cancer. The role of cytochrome P-450 in this process is now relatively well understood. Dr. Daniel Nebert, formerly a five-year M.D.-M.S. student with Dr. Mason, is now chief, developmental pharmacology branch, National Institute of Child Health and Human Development. He worked with cytochrome P-450 for his thesis project and has shown that the gene for P-450 is required for transformation of normal cells to cancer cells in mice exposed to certain compounds in cigarette smoke and car exhaust. Another former student, Dr. Michael Waterman at the University of Texas in Dallas, has contributed in this field by synthesizing P-450 from RNA in test tubes.

Determining the mechanism of oxygen-activating enzymes requires taking very rapid readings of absorbed light spectra in order to detect brief transient stages of the reactions. Dr. Peter Lovely, former postdoctoral fellow, and Jon Shapiro, research assistant, of the biochemistry department have designed and built an instrument with money from the National Science Foundation that records a spectrum every 1/1000th of a second. This unique machine is now in its final testing stages.

Dr. Dean Jones, a former Ph.D. student now at Emory University Medical School, developed with Dr. Mason a method of measuring oxygen concentration within the different parts of living cells. This work showed that there are wide differences within cells, normally reaching very low



DR. HOWARD MASON
professor of biochemistry

values in the region where oxygen is utilized to generate energy. This is a new understanding of what may happen when cells are deprived of oxygen, which is called hypoxia.

Basic research of the kind Dr. Mason conducts, he believes, should be conducted in the medical school setting. "While it is not crucial in every case for physicians to understand biochemical mechanisms involved in disease processes, this is a great era of development of scientific medicine. Our students will be better doctors if they do understand the molecular basis of disease."

He suggested that great laboratory science doesn't often translate right away into great medical advances. "Research is slow; it takes painstaking work to acquire and prove new knowledge and to have confidence in it. But great practical advances will never come if research at this basic level is not pursued."

At the HSC, Dr. Mason teaches medical, graduate and nursing courses, and does extensive committee service. He also serves on several committees for the federal government and has edited several books. He says that this intensity of scholarly effort is not unique among his faculty colleagues and scientific associates.

"It has to be called normal life in the modern ivory tower, not particularly rewarding financially, but full of joy."

Stop by: president holds open house for staff, faculty, students

To widen channels of informal communication, HSC President Leonard Laster will be available in his office to visit with HSC staff, faculty or students each Thursday morning.

Dr. Laster is inviting members of the HSC family to stop by his office in Baird Hall, room 1011, between 9:30 and 11 a.m. on Thursdays. He asks that visitors call first, ext. 8252, to make sure he has not been called away unavoidably.

Although he feels that the Health Sciences Center is neither an oversized nor a dehumanizing organization, Dr. Laster believes that informal communication still is a challenge. To help overcome this problem, he would be interested in hearing thoughts on all subjects, but particularly on how to help the university perform more humanely, more efficiently, and more effectively.

"Despite the many stresses and difficul-

ties of these times, it is my sense that the spirit of this university is good," Dr. Laster said.

"We are working together in gratifying harmony. There is a dedication to duty here that could well serve as a model for many other institutions," he said.

Dr. Laster hopes to reinforce this spirit through even closer contact with members of the HSC community.

Hospital accreditation survey successful

A third accreditation survey, which occurred last fall, was also successful, according to President Leonard Laster.

University Hospital has been awarded a full, two-year accreditation, the third consecutive full accreditation by the Joint Commission on Accreditation of Hospitals (JCAH) received by the Hospital, the President said. The JCAH completed a review of findings of their survey conducted in October and found no major areas of concern.

During October, accreditation visits were held by the Northwest Association of Schools and Colleges (NWASC) and by the National League for Nursing (NLN). Each was successful with the University gaining full accreditation by the NWASC and baccalaureate and master's programs in the School of Nursing receiving six-year accreditation from the NLN. At the same time the Oregon State Board of Nursing renewed its accreditation of the school's baccalaureate program.

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