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The Oregon Health Sciences University includes the schools of Dentistry, Medicine and Nursing; Vollum Institute for Advanced Biomedical Research; Center for Occupational Disease Research; University Hospital; University Clinics (medical and dental); Doernbecher Children's Hospital; and Crippled Children's Division.

The Oregon Health Sciences University
OHSU NEWS

"An active field of science is like an immense anthill; the individual almost vanishes into the mass of minds tumbling over each other, carrying information from place to place, passing it around at the speed of light."

Lewis Thomas,
research pathologist,
author

1987 in review — year of growth, year of promise

1987 was a whirlwind year at the OHSU. Announcements of new educational, patient care and research programs; unprecedented research funding; and emergence of benchmark construction and administrative changes occurred — like the speed of light — faster than anyone could perceive.

This first issue of the 1988 OHSU News focuses on some of the most significant events of the past year, events that will affect the lives and minds of Oregonians for years to come. The pages within reflect a year of change. Rather than telling the story ourselves, we offer you a view of "the Hill" the way science, medical, education, business and news reporters have seen it. Inside are condensed versions of news articles published last year in magazines and newspapers from Silverton, Ore. to New York City.

In many cases, the writers discovered tangible results of a vision fostered by Dr. Leonard Laster, university president from 1978 through 1987. When he resigned in August to become chancellor of the University of Massechusetts Medical School in Worcester, Mass., Dr. Laster left the OHSU in the midst of an unprecedented surge of activity and a sense of excitement about what had happened and what was still to come.

That momentum is now carried forward by interim president David Witter.

The vision — and the dedication of more than 5,300 OHSU faculty and staff; 1,700 students, residents and interns; 12,800 alumni and thousands of supporters — will shape Oregon's health care as it enters the 21st century.

Kirk Wilson, 9, bears cake commemorating the first 60 years of health care at Doernbecher Children's Hospital. 1987 also marked the first year of comprehensive changes at OHSU expected to improve health education, research and patient care for generations to come.

University shares, welcomes diverse talents

The university enjoyed an influx of talent and shared its own as several businesses and health centers pooled expertise with OHSU faculty.

• Patients with arrythmias, or irregular heartbeats, will benefit from two separate agreements the OHSU made with Good Samaritan Hospital and Medical Center and Saint Vincent Hospital and Medical Center. OHSU faculty and researchers will share expertise and facilities with cardiac specialists at the two nearby health centers.

• Portland-area trauma patients will receive faster, more effective care as a result of an agreement between the OHSU and Emanuel Hospital and Health Center which has been approved by the State Health Division. The state designated the hospitals as Portland-area trauma centers, hospitals that would treat patients who had life-threatening injuries. The plan calls for ambulance attendants to bring serious trauma patients who are unable to request a particular hospital to either Emanuel or University Hospital, depending on paramedics' location. Helicopter ambulances, which typically carry patients from beyond the Portland area, will alternate between the two hospitals.

• The Infant Hearing Center moved from Good Samaritan Hospital to the OHSU last fall and forged an affiliation designed to help the private, non-profit center provide intensive training for hearing-impaired infants, small children and their families. The center began in 1971 and serves up to 225 children each year.

• Oregon's 50,000 victims of Alzheimer's Disease and their families may find new hope in the Alzheimer's Disease Center of Oregon, which combines efforts of three health-care institutions — Good Samaritan Hospital, Veterans Administration Medical Center and OHSU — with the Alzheimer's Disease and Related Disorders Association. The center is co-directed by Dr. Oscar Marin, chairman of Good Samaritan's Department of Neurology, and Dr. Earl Zimmerman, chairman of the OHSU Department of Neurology. It is the first center in the nation where a private community hospital, state health sciences university, federal medical facility and private, non-profit support group are joined in a collaborative effort to provide research and service to victims of this disease. Oregonians will have the chance to join these efforts in a very tangible way during the next few months by indicating their support on income tax forms. The voluntary checkoff will direct the state to donate a portion of each tax return to the Alzheimer's center.

• Future health professionals and their patients are benefiting more than ever from joint education agreements between the university and the Veterans Administration Medical Center. The OHSU-VAMC affiliation began 50 years ago with an agreement to share teaching, research and patient care resources between the School of Medicine and the veterans center. Last year new programs were established which help train the university's dental and nursing students. The first joint residency program between the VA and School of Dentistry now trains future periodontists how to better treat patients with gum disease. In addition, about 25 of the VA's master's-prepared nurses now assist in teaching OHSU nursing students. The nurses lecture in their specialty areas and teach in clinical settings, providing special expertise in areas of medical nursing such as cancer, hypertension and conditions of the heart, lungs and immune system.

• A milestone in national and international support for OHSU research was reached when Ciba-Geigy Pharmaceuticals Division formed a cooperative agreement with the Vollum Institute. Ciba-Geigy, one of the world's largest pharmaceutical companies, will provide a long-term grant of $2.5 million, or $500,000 for five years, to promote exchange of information and research between scientists at both institutions. The agreement is unusual among public and private sector projects because it supports basic research, rather than research directed at specific products, and because the grant involves more dollars over a much longer period of time than grants usually offered by private industry.

• The Vollum Institute will receive several hundred thousand dollars over the next three years from Cambridge NeuroScience Research, Inc., to fund basic research into drugs to treat neurological disorders. The Cambridge, Massachusetts, company is specifically interested in the work of Dr. Eckard Weber, senior scientist and acting director of the Vollum Institute, and Dr. Olivier Civelli, assistant staff scientist. Weber is exploring substances that may someday assist in the diagnosis and treatment of patients with schizophrenia and other mental illnesses. Civelli hopes to develop a method for cloning the brain's opioid receptor genes. This would provide researchers with new ways to study narcotic addiction and to learn about how the brain regulates our response to pain, stress, learning and memory.

• An OHSU researcher's pioneering investigation of whether calcium can lower high blood pressure attracted a $4 million grant from the National Dairy Promotion and Research Board. The support is the board's most extensive commitment to fund research at a single institution. The research, conducted by Dr. David McCarron, professor of medicine, co-head of the Division of Hypertension, and director of the National Dairy Board Institute for Nutrition and Cardiovascular Research, indicates that the addition of calcium to the diet of animals and some humans with high blood pressure significantly reduces their blood pressure.

(continued on page 2)

1987 in review: advances in patient care, education reshape health care

University's patient care services renew lives

The university's clinical facilities treat thousands of patients from every county in Oregon and throughout the Northwest region for problems ranging from the common cold to the rarest and most complex of illnesses. Last year approximately 16,500 adult patients (ages 22 and over) were admitted to University Hospital. Doernbecher Children's Hospital cared for more than 6,500 children (from birth through 21) in its Neonatal Intensive Care Unit, Pediatric Intensive Care Unit, nurseries, day surgery and general pediatric units. Outpatient clinics recorded 97,000 adults visits and 23,900 pediatric visits in the nearly 60 specialty and general clinics. The Emergency Department recorded 24,437 visits and the poison control and drug information programs handled 42,000 calls.

The School of Dentistry dental clinics treated more than 5,000 patients, including 600 children, 800 dental hygiene patients, 1,000 emergency patients and 750 denture patients.

Oregon is one of only three states in the nation in which Crippled Children's Division services are administered by a university health sciences center. With 8,500 active patients (50,000 annual visits), the CCD provides diagnosis, treatment and rehabilitation for handicapped people and their families throughout the state.

- Eighteen Oregon and Washington residents found renewed lives through heart transplants at University Hospital in 1987, including 20-month old Jeremy Koertje. Oregon's first child to receive a heart, Jeremy is among only about 50 heart recipients worldwide under age 10. The OHSU has performed 46 heart transplants since conducting Oregon's first on Dec. 4, 1985.

- The university became the second center on the west coast to perform pancreas transplants. A Portland man with type 1 diabetes mellitus, a degenerative disease, received a new pancreas Sept. 24 at University Hospital. Pancreas transplantation offers patients a chance to arrest and possibly reverse severe complications of diabetes mellitus, such as blood-vessel damage, kidney failure and blindness.

- Seven babies were born to four previously infertile couples in 1987 with help from the OHSU Invitro Fertilization Service. Oregon's first in vitro baby was born to a Eugene couple Dec. 22, 1986, thanks to the service, and five more couples have become expectant parents with due dates slated for 1988.

- Doernbecher Children's Hospital celebrated the beginning of its seventh decade of delivering advanced pediatric health care. Treating 20,000 children annually, Doernbecher performs 99 percent of the heart surgery on newborns in the state and cares for 80 percent of Oregon's pediatric cancer patients. The hospital is also Oregon's pediatric kidney transplant center and operates its largest neonatal transplant system. Its history as a pioneer in pediatric medicine and its role as a major teaching and research center has attracted some of the country's most respected pediatric specialists.

- The Crippled Children's Division was chosen by Multnomah County to develop an employment program for developmentally disabled people. The program will help integrate participants back into the community and will be used as a model by other agencies. In addition, Dr. Ellen Magenis, professor of medical genetics and pediatrics, was recognized at an international gene-mapping conference in Paris for her research. Magenis and a Colorado researcher, Ann Smith, discovered that nine of their patients with mental retardation and similar facial abnormalities were missing the same piece of genetic information from a particular chromosome. The group named the condition Smith-Magenis Syndrome.

Whether they come to the OHSU for life-saving intensive care, like this tiny newborn, or routine check-ups, patients benefit from research-based attentions of doctors, nurses and other health professionals.

Oregon Health
Sciences University News

Vol. 17, No. 1
Feb. 1988

The OHSU News is produced by the Office of University Communications, Oregon Health Sciences University, 3181 S.W. Sam Jackson Park Road, Portland, OR 97201

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Special thanks to Dana Olsen, Northwest Magazine photographer, for use of photograph accompanying story about teenage Cambodian refugees. All other photographs in this issue were from OHSU files.

Thanks are also extended to the dozens of journalists who believed in the importance of the OHSU's work to health and to their readers. This special "Year in Review" issue would not have been possible without them.

Classroom, lab progress means better care

When 353 young health care professionals from 26 Oregon counties marched through Commencement ceremonies last June, they entered dental, medical, nursing and allied health fields from educational programs that have gained national recognition.

- The School of Dentistry was granted the highest approval status of the five possible American Dental Association classifications, following a rigorous accreditation process. The school also completed the first phase of a major project to revise curriculum and programs. Funded with $95,000 from the Pew Memorial Trust, the school was one of 21 chosen from more than 50 applicants to develop new educational methods to keep pace with changes in dentistry.

- The School of Medicine reached its centennial with reason to celebrate. After attracting seven new department chairmen over the past three years, the school's research programs grew by about 70 percent. It was awarded nearly $18 million — the highest in its history — to support research in heart disease, cancer, trauma, ophthalmology and other fields. Also, new curricula were developed to emphasize medical ethics, to respond to a growing elderly population and to help doctors provide out-patient solutions to problems that traditionally involved hospital stays.

- A graduate program in neuroscience, molecular and cellular biology for students working on Ph.D. degrees was approved by the State Board of Higher Education. The program will focus on fields such as biochemistry, cell biology and anatomy, and medical genetics. Funded by a grant from Ciba-Geigy Corp., a pharmaceutical company, it is expected to enroll 35 students.

- The School of Nursing received the highest possible rating from its accrediting organization, the National League for Nursing. The school gained national prominence for its research, receiving nearly $1 million in federal research funds and increasing this funding over the past five years by 550 percent. It also expanded outreach programs by taking the state's first rotating master's degree program for nurses to Southern Oregon State College in Medford. In two years, the program will travel to another sparsely-populated part of the state that would be unable to support such training on a permanent basis.

- The Vollum Institute for Advanced Biomedical Research opened, beginning a new era of brain research in Oregon. Named for its benefactors, Howard and Jean Vollum, the $20 million institute is one of the few centers of its kind to explore the brain at the fundamental levels of genes and proteins. It has attracted nationally ranked scientists and offers the opportunity for collaborative work among researchers and clinicians throughout the university and affiliated institutions. To complement the institute and surrounding buildings, members of the university's Board of Overseers spearheaded efforts to add a courtyard, terrace and plaza.

- A new Center for Occupational Disease Research received final approval from the Oregon State Board of Higher Education. The center will specialize in examining the effects of workplace toxins on the nervous system, including the brain. It is believed to be unique among occupational health research facilities because of its use of the science of molecular biology — the study of genes and proteins — to examine occupational disease.

Triumph, anticipation at the brink of new careers add to excitement of graduation day.

Board of Trustees sets agenda, welcomes members

At its annual meeting last December the OHSU Foundation Board of Trustees welcomed eight new members and launched a new year of increased outreach activities.

The board, formed in 1980 with 14 members, now includes 34 business and civic leaders who serve as advocates of the OHSU, working to increase private support and awareness of the university throughout Oregon. Members, who serve four-year terms, have fiduciary responsibility over the OHSU Foundation's assets of $52 million.

New members are Dennis Buchanan, Portland, account executive for the Portland office of Regis McKenna, Inc., and former Multnomah County executive; John DesCamp, Portland, president of Weiss, DesCamp, Botteri and Huber, Attorneys and member of the Doernbecher Children's Hospital Guild Board of Directors; Kraig Kramers, Portland, president and chief executive officer of Graphic Arts Center; Georges St. Laurent, director of Sun Banks in Longwood, Fla., and a resident of Eagle Point, Ore.; Joanne McAdam, Eugene, owner of Made In Oregon; Dean Pape', Eugene, chairman of the board of Pape' Brothers, Inc.; Oscar Turner, Jr., Portland, branch manager of IBM Corporation's Information Systems Group, South-west Marketing Division; and Donald Tykeson, Eugene, retired businessman. Cynthia Ford, Medford, director of the Southern Oregon Regional Services Institute, was re-elected.

Board members also re-elected officers at the December meeting: Chairman Brian Booth, Portland, partner in the Tonkon, Torp, Galen, Marmaduke and Booth law firm; Vice Chairman and Treasurer Dan Regis, Portland, managing partner, Price Waterhouse; Secretary A.W. Sweet, Coos Bay, chairman of the board of Western Bank.

"New members have enhanced the diversity of the board not only through the expertise they bring, but by increasing the geographical representation," Booth said. "They also share a common interest in the university's mission of education, research and health care."

The OHSU Foundation Board of Trustees recently welcomed eight new members (from top left): Dennis Buchanan, John DesCamp, Kraig Kramers, Dean Pape', Georges St. Laurent (not pictured), Joanne McAdam, Oscar Turner and Donald Tykeson. Brian Booth, chairman, was re-elected.

In addition to its fiduciary responsibilities, the board serves as an advisory body to the university president in the following areas: public policy, technology transfer, capital development, new program development and relationships with other regional health care providers.

1987 highlights

Booth noted the following as major accomplishments in 1987 by the Board of Trustees:

- raising $2.2 million of the $2.5 million needed to fund the cancer chair, which will coordinate and increase the OHSU's cancer research;
- establishing a highly successful alumni annual giving program that increased alumni donations by 80 percent in the School of Dentistry, 87 percent in the School of Medicine and 300 percent in the School of Nursing.
- expanding board membership to include alumni — Dr. James Bell, (Dentistry, class of '53); Dr. James Gilbaugh, Jr. (Medicine, class of '63); and Catherine Knox (Nursing, class of '73).
- completing the courtyard near the Vollum Institute for Advanced Biomedical Research;
- receiving gifts from a record of about 5,300 individuals and organizations to support university programs. Foundation assets grew by about 67.8 percent during fiscal year 1986-87, primarily due to a $15.2 million bequest from the late Howard Vollum. Even aside from this gift, assets grew by 19 percent.
- increasing public awareness of the university through the board's Marquam Hill Steering Committee. Programs include the sixth annual Marquam Hill lecture series and the campus tour program which has given more than 7,300 visitors a first-hand look at OHSU programs since 1982.

Goals for 1988

A major goal for the board in 1988 is to increase awareness of the OHSU throughout Oregon. "We're beginning to meet more with business and community leaders outside Portland to learn what these communities need and want from this university," said Board Member Helen Bledsoe. Bledsoe also serves on the Marquam Hill Steering Committee, which is responsible for these efforts. So far, gatherings have been held in Medford, Eugene, Bend, Redmond and Coos Bay. "We feel it's important for communities to understand the OHSU is not in competition with local hospitals. We want to enhance our service to these and other health care providers. We also hope to establish a bigger network of Oregonians to support and help guide the direction of Oregon's only academic health center."

Another major goal for 1988 is to increase research funding for OHSU faculty. The board pledged three $25,000 "challenge grants" for the schools of Dentistry, Medicine and Nursing. Schools have until Dec. 31, 1988 to match these grants through alumni annual fund drives.

Plans are also under way to include University Hospital in the Foundation's annual giving program. The Centennial Endowment Fund was created to help the School of Medicine launch its second 100 years.

Veterans medical center opens doors, builds stronger ties to university

The new Veterans Administration Medical Center is a welcomed neighbor to the OHSU.

The Veterans Administration Medical Center, its patients and affiliates had two historic reasons to celebrate this new year.

Barry Bell, medical center director, received the rank of Distinguished Executive in the Senior Executive Service from President Ronald Reagan at a White House presentation Jan. 5. The award is given to three Veterans Administration employees each year. There are 250,000 VA employees nationwide and 172 VA medical centers.

Bell received the honor for his people-oriented management style, leadership in establishing cooperative agreements with OHSU and with the Department of Defense, and management of the construction and move to the new medical center building.

This month, OHSU's 50-year affiliation with the VAMC grows even stronger.

On Feb. 25, patients who eat breakfast at the old VA facility should be eating lunch at a new 490-bed Marquam Hill building.

It is a move that improves VA patient care, enhances the bond with OHSU and fortifies Portland's medical community as a whole.

The symbiotic relationship between OHSU and VA helps patient and doctor. From the university's perspective, the VA hospital's patient population gives student-physicians experience in treating a wide variety of ailments.

For its part, the VA sees the university as a fertile source of medical talent and expertise.

Administrators at both centers agree one of the major benefits of their new and improved partnership is cost savings.

"The capital costs for equipment are enormous," said Bell. "If you're a teaching institution you have to buy the latest equipment as soon as it's available. You have to teach people today on tomorrow's equipment."

A planned multi-million dollar footbridge connecting both facilities will serve as a practical and symbolic link between OHSU and the VA.

Besides the improvement for OHSU's medical students, the VA's patients will receive better care.

First, the new hospital will boast a larger staff. Currently, there is the equivalent of 114 full-time physicians at the VA. That number will rise by 27 full-time equivalent physician positions, along with an increase in nursing and maintenance staffs.

Though faced with some construction delays, the new VA facility came in $40 million dollars under budget, due in part to intense competitive bidding among Portland-area subcontractors.

Second, the streamlined partnership will allow each facility to use some of the other's services. The university will continue to perform lab tests, surgical and nuclear diagnostic procedures and physical therapy for VA patients.

In turn, the VA will offer its facilities and expertise to OHSU to help train its dental, medical and nursing students.

The new VA hospital will double the number of its operating rooms from the five that now exist. Currently, those operating rooms are running at 95 percent capacity.

Larger operating theatres will be featured in the new facility to accommodate new, massive surgical equipment developed in recent years.

As a result of more operating rooms, for example, the number of heart surgeries is scheduled to jump from 325 to 400 a year.

Research institute celebrates opening

Oregonian, April

The handsome new terra cotta building at Oregon Health Sciences University houses research that promises to trigger activity as vigorous as a chemical messenger's on a neuron.

Celebrations this month will herald the opening of the new Institute for Advanced Biomedical Research and underscore its significance as an Oregon institute dedicated to a highly specialized area of brain research.

The $20.4 million Vollum Institute is unique in the world of research in that it focuses entirely on the molecular workings of brain cells. Centers elsewhere generally study overall behavioral or anatomical aspects of the brain.

In their quest, Vollum Institute scientists will seek to unravel secrets of the mechanisms of the brain's natural messengers, called neurotransmitters. These chemicals send and receive messages influencing the way cells behave. The researchers seek to know what happens when neurotransmitters misfire, causing diseases such as Parkinsonism, schizophrenia and Alzheimer's.

Innovations that have revolutionized brain research — microscopic and photographic techniques, electrical probes and the ability to cut up genetic material and move it around — are a few of the tools the researchers will use in exploring the workings of this mysterious 3-pound mass of tissue.

Finding the mechanisms of even a few of some 10 billion brain cells has been called the last frontier of research. Thousands of brain cells, each "talking" to others in about a trillion different electrical connections, could keep researchers infinitely busy. Neurobiologists have spent years understanding the structural details of just one molecule.

OHSU's president, Dr. Leonard Laster, believes the institute's bright young researchers are equal to its task. He terms the Vollum Institute "one of the most intense and elaborate organizational creations to foster work in neuroscience."

And the institute is not — as some critics feared it would be — an elite group of scientists doing cloistered research out of the mainstream of university activity, he said.

Instead, the institute's pink glow extends figuratively as well as literally to enhance other scientific and clinical endeavors on the OHSU campus and even to the Oregon Regional Primate Center.

Hand-picked by the institute's first director, the late Dr. Edward Herbert, the researchers are exceptional, if not elite. And they are vibrant: T-shirts, blue jeans, brightly colored headbands are more prominent attire than lab coats. In some laboratories, the air is filled with rock music. These researchers came — many on a handshake — from Stanford, Harvard, Massachusetts Institute of Technology, Yale, Columbia and the University of Oregon, to work with Herbert.

A widely known pioneer in molecular neurobiology, Herbert was "one of the best-respected and best-liked people in the field," says James Douglass, a junior scientist who was a postdoctoral student under Herbert at the University of Oregon when the institute was still a vision.

The largest research group so far, about 15, is headed by the institute's acting director, Dr. Eckard Weber. In its first-floor laboratory, his group is studying receptors — specialized cell sites where a molecule of a neurotransmitter or drug can bind. One receptor, sigma, is especially interesting to the group because it is thought to be involved in mediating special types of mental illness, such as schizophrenia.

Second-floor researchers include Dr. Alan North, Dr. Annmarie Surprenant and John T. Williams, who came from MIT in January. Their main interest is electrophysiology — basically studying how electrical currents are passed from one end of a nerve cell to the other. They stick electrodes into cells to determine, for example, how cocaine and other drugs of abuse affect brain cells' ability to pass currents through the cell. Their work may lead to better understanding of mechanisms causing addiction and ways to block it.

Researchers on the two top floors of the Institute, including Douglass, Olivier Civelli and Michael Forte, use simple genetic systems to understand genes that govern the workings of many of the brain's peptides, or amino acid compounds.

Those are just a few of the research projects they and others are involved in at the institute.

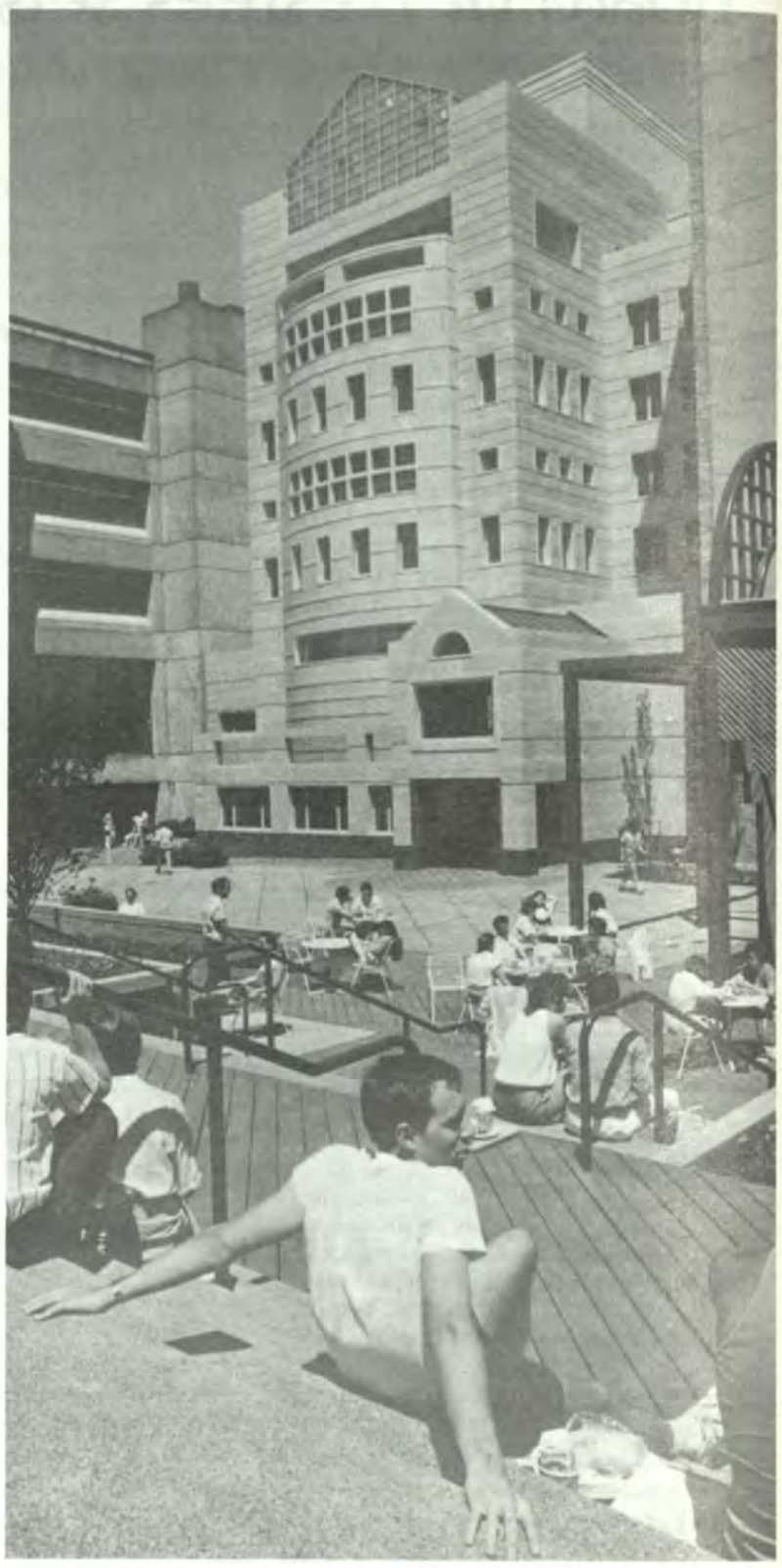
People who do basic research are generally uncomfortable with questions about specific future products of their work, but Laster finds some predictions in order:

"The future development of medicine at the bedside is going to be influenced and changed dramatically by the (application of the) science of molecular biology to the study of human medicine," he said, citing recent genetic breakthroughs in Huntington's disease and manic-depression.

Laster sums up his view of the institute by calling it "an institution dedicated to the premise that if you get the youngest brilliant people working together and asking questions in important areas, in time dividends will emerge. It may not come for 10 or 15 years, or it may come tomorrow."

Facts and figures

Building's cost: $20.4 million
Size: 67,000 square feet
Staff: 60, eventually to increase to 140
Annual budget: $1.5 million in 1986-87; eventually $4.5 million.



The Vollum Institute for Advanced Biomedical Research, which opened in April 1987, holds the bright promise of unlocking mysteries of the brain.

Doernbecher Children's Hospital plans facility remodeling, expansion

Portland Business Today, Sept.

Doernbecher Children's Hospital at the Oregon Health Sciences University is developing a plan for the future.

About one third of the work at OHSU involves children, said Dr. Leonard Laster, outgoing president of OHSU.

Laster talked about the children's hospital and its needs at the hospital's Silver Tea held Friday.

"Doernbecher is the state's center for caring for children with complex medical problems," he said adding, "Excellence can rarely be achieved without the proper setting and without the proper tools."

Laster said the hospital and its guild both agree that the current facility must be expanded, recreated and remodeled before too long to serve the needs of children in the future.

And the hospital has made several motions toward the future, said Dave Witter, interim OHSU president.

Portland architecture firm Zimmer Gunsul Frasca Partnership has designed a conceptual plan of options for altering Doernbecher to consolidate services.

Doernbecher currently occupies the top four floors of the University Hospital South. Also scattered throughout the campus are laboratory facilities, faculty offices and different children's services such as intermediate neonatal care, Witter explained.

"The goal is to get things consolidated and to upgrade them to provide adequate space," he said.

What is needed, Witter said, is to consolidate all the intensive and intermediate neonatal care units together and relocate laboratory facilities and faculty offices adjacent to the patient care unit.

"The current facility was built over 30 years ago, and care practices have changed considerably," he said. "We like to encourage families to stay with their children but that's very difficult now because the rooms are so small."

Witter added that all these modifications will involve expanding the current children's hospital.

The plan, thus far, would be to add onto the C wing of the hospital, which Witter explained originally was designed for 14 floors and currently has nine.

Also included in the conceptual plan is the creation of a second entryway to Doernbecher on the ninth floor.

"There are a couple of problems that exist with the south hospital," Witter explained. "Right now you come into just another hospital. We want to make the coming into Doernbecher something special for children.

"What we're trying to do is make it very open and nonthreatening," he added.

New eye research center first of its kind in U.S.

Oregonian, Sept.

The Oregon Health Sciences University department that brought the world the first artificial tears for dry eyes, made major contributions toward designing the first operating microscope for eye surgery and established an international registry for tracking the side effects of eye drugs, will build a major eye research center.

Dr. Frederick T. Fraunfelder, professor and chairman of the department of ophthalmology, is seeking the final $1.9 million for a $17.2 million OHSU eye center to be completed by late 1988 or early 1989. Most of the money comes from donations.

The department trains medical, nursing and pharmacy students, as well as ophthalmic assistants and technicians and postdoctoral fellows in ocular research. In addition it offers continuing education for practicing ophthalmologists.

Since the department was organized in 1944, it has made major contributions in pharmacology, toxicology and the development of diagnostic and therapeutic technology.

The department has one of the most competitive residency programs in America, he said. For example, for the 1986-87 academic year, 640 doctors have contacted the program to obtain information about four residency training positions, he said.

Moreover, The National Registry of Drug-Induced Ocular Side Effects — an international registry for the collection and dissemination of information on drugs, chemicals and environmental factors that affect the visual system — is located at OHSU.

The new eye center will be the first in the United States to combine private, state and Veterans Administration eye programs in one building, Fraunfelder said.

The six-story building will be adjacent to Terwilliger Parkway at the intersection of Campus Drive. Plans call for a parking garage for 310 cars.

The stories above are condensed.

OHSU tackles one of patients' biggest problems: parking

Portland Business Today, Aug.

Groundbreaking ceremonies for the new parking structure at the Oregon Health Sciences University Monday were designed to provide a laugh, but the parking situation at the facility is no joke, officials said.

David Witter, University Hospital director, said the new 420-space structure will solve the single greatest problem people coming to the campus face — parking.

"We think that will be enough (spaces) for the foreseeable future," Witter said.

The new facility, designed to blend in with existing buildings, will be located at the north entrance to the campus.

Portions of the five-story structure, covering about 150,000 square feet, will be underground. The above-ground section will house medical offices, although funding has not yet been specified for this portion of the project.

Shriners Hospital for Crippled Children, which will have 100 of the new parking spaces, will contribute $1.3 million to the $6.5 million project. The remaining cost of construction will be funded from hospital revenues.

Life from a test-tube–Portland baby born with high-tech start

Columbian, Dec. '86

One-day-old Kristin Michelle lay in her doctor's arms and grabbed his finger with her tiny hand Sunday as television cameras rolled and reporters scribbled.

Kristin, who arrived at Oregon Health Sciences University Hospital late Saturday night, was the first "test-tube" baby born in Portland, and the second in Oregon, under the hospital's in-vitro embryo-transfer program. She weighed 7 pounds, 9 ounces.

Doctors said the high-tech baby and her mother, Joan, 30, were in good health and should be able to leave the hospital in about two days. Joan and her husband, Vern, 28, are Portland residents. At the family's request, hospital officials did not release their last name.

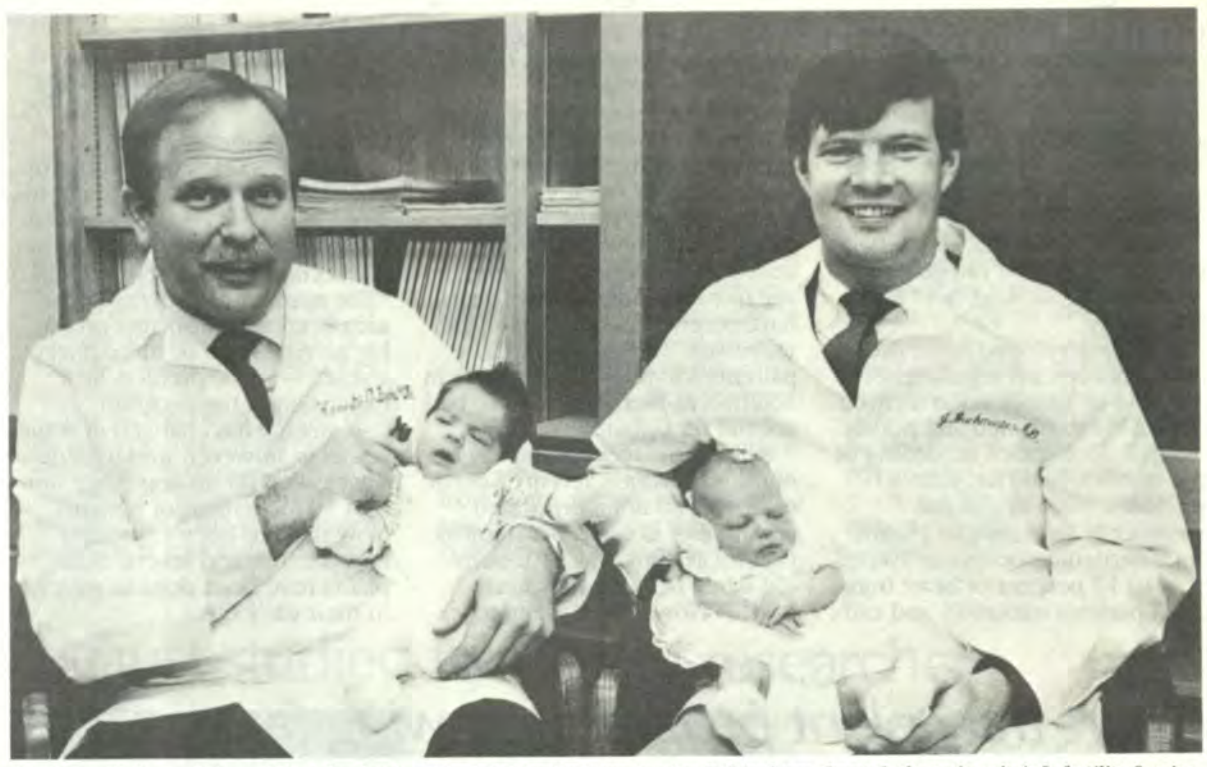
Before the embryo transfer, Joan had a 10-year history of infertility and never had been pregnant because of peritubal disease.

"It's a very humbling experience, I think, to follow a pregnancy from the two-cell embryo stage through delivery," said Kristin's physician, Dr. John Buckmaster, a geneticist and perinatalogist. "It's amazing how all that works. It's kind of neat."

An earlier test-tube baby boy from the OHSU program was born in a Eugene, Ore., hospital on Dec. 22. Both children began as embyros that were created by obtaining their parents' sperm and eggs and combining them in a "test tube" (actually a glass dish) for about two days, and then implanting some of the resulting embryos in the mother's uterus.

Several such pregnancies now are in progress because of the OHSU clinic's efforts, including a set of twins, said Dr. Kenneth Burry, the infertility program's co-director.

A similar pregnancy also is in progress at OHSU under a newer technology called gamete intrafallopian transfer (G.I.F.T.), Burry said. In that procedure, available for only a few months in Oregon, sperm and eggs are obtained and placed immediately in the mother's fallopian tube, where fertilization occurs, he said. "The test tube is eliminated here."



Dr. Kenneth Burry, left, and Dr. John Buckmaster hold the first two in vitro babies born through the university's Infertility Service.

Burry said in-vitro embryo transfer typically is used if the mother's fallopian tubes are damaged. G.I.F.T. can be used when the fallopian tubes are intact, but the father has a low sperm count, he said.

About one couple in six is infertile. About 800 couples have sought treatment at the OHSU hospital's infertility clinic. Among those treated, pregnancy has been achieved for about half by a variety of procedures such as artificial insemination, ovulation induction, surgical correction of tubal and uterine diseases, and microscopic reversal of vasectomies and tubal sterilizations.

State Health Division designates OHSU as regional Level I trauma center

Portland Business Today, Oct.

Oregon Health Sciences University Monday was named the Level I (regional) trauma center by the Oregon State Health Division.

Emanuel Hospital and Health Center, which also was seeking a Level I designation, was awarded the Level II (area) hospital mark.

"What it means to the hospitals in the Portland metropolitan area is the ending of a lack of uncertainty," said Dr. Lester Wright, state health officer, during a news conference at the Clackamas County Communications Center in Oregon City.

The competing hospitals had to meet a variety of criteria for the designations, submit proposals to the state and undergo site surveys by teams of nationally recognized medical experts prior to their selection.

University Hospital staff rush patient from helicopter to the Emergency Room.

The Level I hospital, according to the administrative rules, manages severely injured patients, provides trauma-related medical education and conducts research in trauma care. It must be able to provide a trauma team 24 hours a day.

Level II facilities also manage the severely injured patient, according to the rules.

Patient care at both levels is the same, Wright said.

David Witter, who will be interim president of OHSU when Dr. Leonard Laster leaves Nov. 1, said the selection of OHSU as the Level I hospital relates more to the application of the requirements than to the type of care the hospitals provide.

"Portland is blessed with really outstanding hospitals," Witter said.

OHSU, as a Level I hospital, is assured 600 patients a year, Wright said, while Level II Emanuel is to receive at least 350 patients.

The Level I regional facility is only part of the trauma system process. There are 10 planning areas statewide that will make up the trauma system, Wright said.

Defibrillator implant corrects 'sudden cardiac death' episodes in southern Oregon woman

Roseburg News Review, Feb.

OAKLAND — "I know it's there," Janice Calhoun says of the new and rare device that was implanted in her heart and abdomen last month at Oregon Health Sciences University in Portland.

The Jan. 23 surgery marked the first time a cardioverter defibrillator was installed in a patient in Oregon.

The 44-year-old mother of three finds the strange new sensation comforting. If her heart beats suddenly out of control, as it has twice in the past, she knows the defibrillator will send electrical shocks and convert the fast rhythm to a normal one within 35 seconds.

Not to be confused with a pacemaker, the defibrillator works to correct a condition called "Sudden Cardiac Death," which is experienced by an estimated 400,000 Americans a year.

A healthy woman, Calhoun first experienced it in Oct. 1983.

"I was vacuuming the house and started feeling really strange with severe left arm pain and then shoulder pain," she said. A friend took her to the Douglas Community Hospital Emergency Room.

"I had been there about 20 minutes when my heart went into fibrillation and quit," she said. "It took three minutes to get it going again."

Fibrillation is described as very rapid irregular noncoordinated contractions of the heart.

After the occurrence, her health returned quickly and Calhoun resumed her activities with only a few "minor chest pains." Last September, however, the pains struck again and she was rushed to Mercy Medical Center.

Of the people who suffer the episodes, an estimated 80 percent die before they can be resuscitated. Of those who survive, the one-year mortality rate is approximately 40 percent, according to the Office of University Communications at OHSU. In properly selected patients, implantation of the new defibrillator can reduce that mortality rate to less than three percent.

Calhoun's heart was damaged as a result of the second episode and she realized she might not survive a third.

But luck was still on Calhoun's side because Dr. Iftekhar Ahmed, her Roseburg cardiologist, was aware of the new defibrillator and referred her to the university.

The device was implanted during a seven-hour surgery by Drs. John McAnulty and Jack Kron, cardiologists, and Drs. M. Adnan Cobanoglu and Albert Starr, cardiopulmonary surgeons.

During the open-heart surgery, wires or sensors were placed in and on the heart and were attached to a pulse generator, which was placed in the patient's abdominal wall.

The defibrillator does not prevent abnormal rhythms, but it sends an electrical shock and converts a fast rhythm to a normal one within 35 seconds.

Cochlear implant restores joys of hearing for profoundly deaf Troutdale woman

Oregonian, May

A dog barks. A windshield wiper squeaks in the rain. The wind whistles through the trees.

These sounds — unnoticed by many people — are music to the ears of Julie Giusto of Troutdale.

Giusto, 34, admits that she also took such sounds for granted until last June, when she suffered a case of bacterial meningitis that left her profoundly deaf.

In addition to losing her hearing, she was also robbed of her sense of balance and equilibrium. In the months that followed she had to relearn how to walk, climb stairs and ride a bicycle.

Attempts to use a simple hearing aid proved unsuccessful. The first glimmer of hope came last fall, when Alexander Schleuning, chairman of the Department of Otolaryngology at Oregon Health Sciences University, told Giusto that she was a prime candidate for a cochlear implant.

Under the cochlear system, a tiny device is implanted in the patient's ear and works with an external transmitter, speech processor and microphone. The microphone picks up sound, which the speech processor translates into electrically coded signals. The signals are relayed by the transmitter to the implant, and the implant stimulates the auditory nerve.

The microphone and transmitter are worn on the head, and the processor is worn on the belt or in a pocket.

Six weeks after the surgery, when the incisions from the operation were healed and the doctors were confident that no complications had developed, the speech processor and transmitter were finally turned on.

After eight months of silence, Giusto heard her first sounds.

"I heard my husband's voice and it sounded just like I remembered him," she said. "Hearing the wind, the windshield wipers, hearing the children cry . . . I couldn't get enough of it. It was so nice after barely winging my way through."

Although it allows her to hear a wide range of frequencies, the implant does not totally restore Guisto's normal hearing.

"The hearing I have is not the same as it used to be," she said. "It sounds like a radio that's not quite tuned in properly."

Still, Giusto's deafness is now hardly noticeable to the casual observer. Her speech is colorful and fluent. The tiny microphone and transmitter she must wear above her ear are hidden beneath her hair. The speech processor is worn on the belt like a portable radio. Receiving the implant and being able to hear sounds again has changed her life, Giusto said.

The stories above are condensed.

Prognosis remains bright for patients in OHSU cardiac transplant program

Oregonian, Dec.

A year after he became the Oregon Health Sciences University's first heart transplant patient, a cheerful, active Wesley Merrill said he would undergo the operation again "without batting an eye."

On Sept. 1, Merrill, 46, of Battle Ground, Wash., did just that — including, he said, not "batting an eye."

Merrill developed some problems between his regular checkups, and an examination showed he had "unexplained and poorly defined accelerated hardening of the arteries," said Dr. Jeffrey Hosenpud, a cardiologist and member of the transplant team. Such hardening occurs in 10 percent to 15 percent of heart transplant patients nationally and cannot be treated with surgery or dilation like other forms of arteriosclerosis, he said.

So the only solution for Merrill was another heart, and two months after the diagnosis he was back in University Hospital.

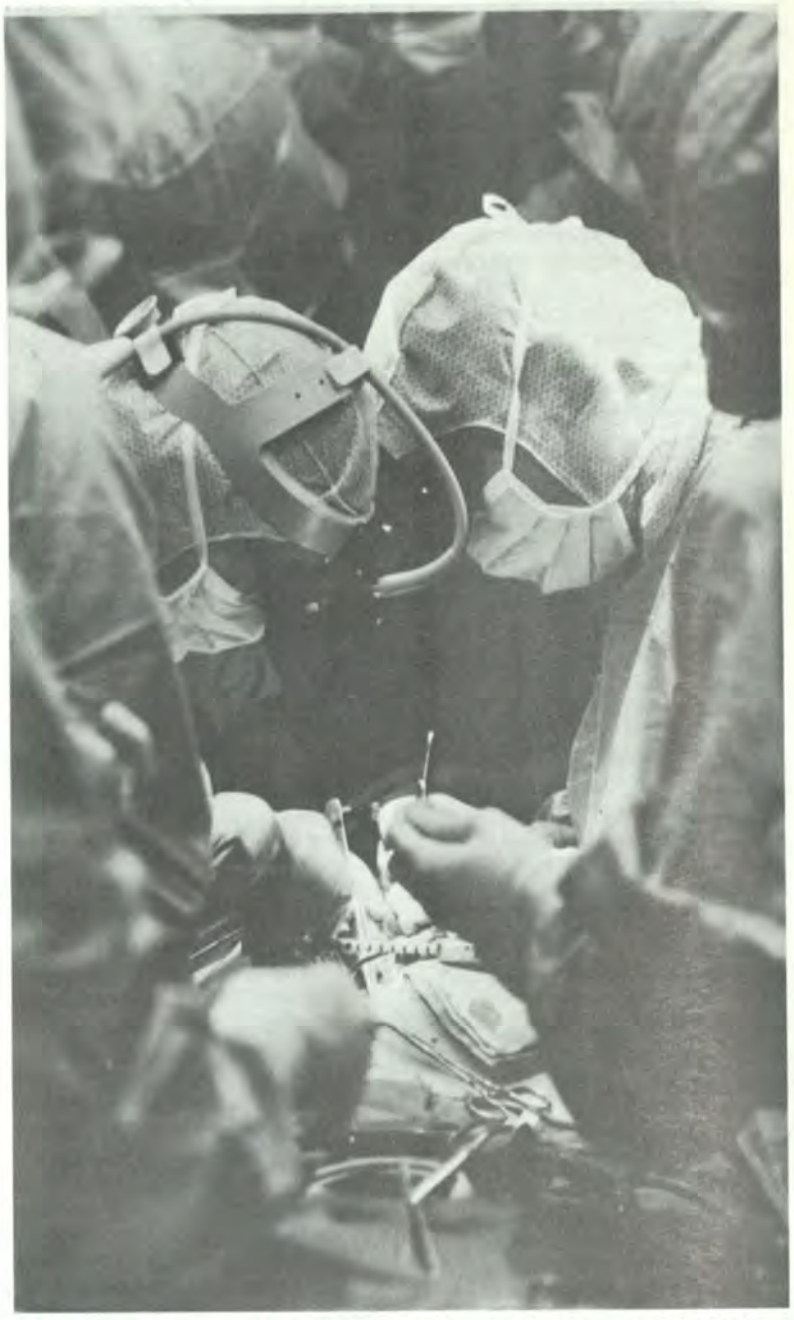
Since Merrill made Oregon medical history with his first transplant, 43 others, ranging in age from 21 months to 63 years, have received new hearts at the university. Thirty-nine of those patients survive, including two in addition to Merrill who have had second transplants.

Among the most physically fit of the survivors is Jeremy Koertje of Curtin, an unincorporated community in northern Douglas County. Jeremy was 21 months old when he got a new heart April 7. Now, said Hosenpud, "He's fully functional."

The operation has become "very routine at this point," Hosenpud said.

Initial predictions were for about one transplant a month by the third year of the program. Instead, the team performed 20 in the first year and has done 26 in the second year. Hosenpud said, "The number of patients in the area needing transplants probably averages two or three dozen a year" — so he predicts little expansion of the program.

It already has changed in some respects, however. Initial guidelines called for an upper age limit of 50 for transplant patients. Now that has been expanded into the 50s, and several transplants have been done in patients in their early 60s.



OHSU surgeons performed the state's first heart transplant Dec. 4, 1985. By the transplant program's second anniversary, 44 people had received new hearts.

Heart transplant program growing fast

Oregonian, Dec. '86

One year ago a medical team sprinted into Oregon Health Sciences University with a new heart for Wesley Merrill, Oregon's first heart transplant patient.

Since then the university has performed 20 transplants, all but one a success. The program has grown faster than any of the other three West Coast heart transplant programs that began in 1985. Indications are that the Portland school is working to make itself the region's major organ transplant center — not only for hearts and kidneys but for liver, pancreatic and heart-lung transplants as well.

The university is building on the success of the year-old heart transplant program that has its foundation in 30 years of kidney transplants at the institution.

The university's program has grown faster than school officials believed possible. By comparison, the University of Washington, which transplanted its first heart in November 1985, has performed 11 such procedures with two deaths. Sharp Memorial Hospital in San Diego transplanted its first heart in October 1985 and has done 15 in the first year without a fatality. A program at Loma Linda University Medical Center in Southern California has performed 12 transplants with three deaths since its first operation in November 1985.

The number of transplants at any institution is determined largely by the availability of donors. After its early successes, the Oregon heart team decided it could be more flexible in the standards that it uses to select organs without affecting quality. That decision was the key to the relatively high number of transplants during the first year.

Adnan Cobanoglu, assistant chief of the university's cardiopulmonary surgery division has seen the results: "I have seen hearts that have been turned down by other programs take off right after implantation. . . . It's quite obvious that as long as the selection is made carefully, you don't have to adhere rigidly to the protocols."

"We have to educate the public," Starr said. "To lose a heart is a terrible waste. Transplantation is not a matter of intellectual titillation for the surgical team. The organ is priceless, and the results (of transplantation) show how priceless it is."

New heart gives OHSU's youngest transplant patient a new start on life

Oregonian, June

The whirlwind of events that swept a toddler away from a peaceful Easter vacation in Burns and left him on the critical list at Doernbecher Memorial Hospital for Children has at least temporarily subsided.

Bouncing around the living room after his treasured beach ball, 22-month-old Jeremy Koertje exhibited few signs last week of having received a new heart less than two months ago.

Dr. Michael Silka and Dr. Jeffery Hosenpud, the doctors who are responsible for Jeremy's care, agreed that Oregon Health Sciences University's youngest heart-transplant patient ever was making a good recovery.

Howard and Mary Koertje, who are living in Hillsboro to be close to Doernbecher Hospital, said that when their son is running around the house they can almost forget how sick he was 10 weeks ago.

But April 17, while the family was spending Easter weekend in Eastern Oregon, the picture of Jeremy's health was not so clear.

What initially had been diagnosed in the Koertjes' home town of Curtin as strep throat was determined by doctors in Burns and Bend to be much more serious. Jeremy was flown to Doernbecher Hospital in Portland.

Examinations revealed that Jeremy's heart muscle had deteriorated because of the effects of congestive heart failure and cardiomyopathy, a mysterious degenerative disease.

One of only about 50 transplant operations that have been done worldwide on children under 10 began at 1 a.m. Monday, April 27. It was performed by Dr. Albert Starr, cardiopulmonary surgeon and director of OHSU's heart-transplant program, with assistance from Dr. M. Adnan Cobanoglu.

Jeremy was released May 10, but he returns to the hospital for checkups twice a week and for a biopsy every two weeks.

Heart recipient Jeremy Koertje enjoys a brownie shortly after his transplant operation.

OKT3 shows promise in preventing heart as well as kidney rejection

Oregonian, April

This week's heart transplant in a 21-month-old boy at Oregon Health Sciences University represents the first time a promising new drug is being used to prevent organ rejection in a child with a new heart.

And the surgery is unusual because heart transplants in young children are rare: Worldwide only about 50 have been performed in children under the age of 10.

The monoclonal antibody doctors are giving the child is OKT3. It has been used at OHSU to reverse acute rejection episodes in kidney transplant patients. But a month ago doctors at an international heart transplant meeting reported good results in an experiment using OKT3 to prevent organ rejection in adult heart-transplant patients. That paved the way for preventive use in a child at OHSU.

Pediatric cardiac surgery is not new at OHSU. It goes back to 1958 when Dr. Albert Starr, now head of the heart transplant team, did the first of many surgeries correcting congenital heart defects in infants. Since the first in December 1985, the OHSU team has performed 30 heart transplants. This was the first in a person under the age of 17 years.

It was only last month at the International Society for Heart Transplantation meeting in New Orleans that University of Utah doctors reported that, given before a rejection episode, OKT3 dramatically reduced rejection in adult heart-transplant patients.

Since then, the OHSU team has used OKT3 with some degree of success to prevent rejection in two adult heart-transplant patients, Hosenpud said, but he pointed out that two patients cannot be considered an adequate sample.

In addition to the obvious danger that rejection holds for the patient, another reason to decrease the number of rejection episodes would be to cut back on the number of heart biopsies the child would need.

Adult heart-transplant patients have routinely-scheduled heart biopsies, and the child will, too. But heart biopsies are grueling. When rejection is detected, the patient requires additional biopsies until the condition is cleared up.

In a pediatric patient, veins are so small that they cannot stand up to repeated biopsies. It is hoped that OKT3 will reduce the need for them.

The stories above are condensed.

Pancreas transplant at OHSU establishes first in the Northwest

Oregonian, Sept.

Oregon Health Sciences University surgeons have performed the first pancreas transplant to take place in the Pacific Northwest.

A 38-year-old Portland man, who is a diabetic and did not want his identity made public, received the whole pancreas of a cadaver donor in a four-hour OHSU surgery that ended at about 3 a.m. Thursday.

Many severe diabetics who have undergone successful whole and partial pancreas transplantation no longer need to monitor their blood sugar or give themselves daily insulin injections, according to OHSU authorities.

Officials said in some cases pancreas transplants had stopped and even reversed the degenerative complications of diabetes — blindness, blood vessel disease, kidney failure — that affect many insulin-dependent diabetics. The success rate for pancreas function one year after transplant is about 45 percent.

The transplant recipient had been insulin-dependent since he was about 10 and had received a kidney transplant in a previous surgery. He is legally blind and has suffered nerve damage and some other ravages of severe diabetes, according to Dr. David Cook, OHSU associate professor of medicine in endocrinology.

By Thursday afternoon, the patient's condition was upgraded from critical to serious. Doctors said the patient's blood sugar level, a measure of pancreatic function, was normal, and the new organ was functioning well.

In Type I, or insulin-dependent, diabetes, the pancreas usually is depleted of insulin so patients depend on daily insulin shots to stay alive.

The estimated cost of the surgery and hospitalization is $30,000, said Tom Kruse, OHSU spokesman.

The patient, who already relies on anti-rejection drugs because of the kidney transplant, will continue on those drugs. Doctors say that if the transplanted pancreas is rejected, the patient can return to his normal diabetic routine of taking insulin shots.

Members of the OHSU pancreas transplant team that performed the surgery were Dr. John Barry, professor and chairman of urology and director of the renal and pancreas transplant program; Dr. Truman Sasaki, associate professor of surgery; and Dr. Thomas Hefty, assistant professor of surgery and urology.

At a news conference Thursday, Dr. Donald Trunkey, chairman of the OHSU department of surgery, said the new program would serve patients who otherwise would need to travel far from home for the surgery. He said 10 people now were being considered for pancreas transplantation at OHSU.

The other pancreas transplant program on the West Coast is at the University of California in Los Angeles where two transplants have been performed in the past two years.

But while many pancreas recipients have been able to stop insulin injections after surgery, evidence for a pancreas transplant arresting or reversing complications is sparse. Only a few cases in scientific literature suggest that degeneration of a diabetic's transplanted kidney can be reversed in those who have a transplanted pancreas. OHSU doctors hope their patient, will experience arrest or reversal of complications.

Children of the Cambodian holocaust studied by OHSU researchers

Northwest Magazine, Nov.

The Chinese film flickered on the screen in front of Dan Dickason's English-as-a-second-language class. The high school students in the classroom watched intently while the film depicted a crowd standing below a huge red banner that displayed Chairman Mao's face. Suddenly a 16-year-old Cambodian girl — call her Sovanna Sang — jumped up and began running around the room. She ran in circles and giggled. She couldn't stop giggling. Cambodians generally don't like to attract attention, and making a spectacle of herself must have been terribly painful for the shy girl. Dickason hustled her out into the corridor.

By running around giggling, and thus tipping off Dan Dickason that something was deeply amiss among the Cambodian teen-agers in his English class, Sovanna Sang set wheels in motion. Dickason's quest for guidance about how to deal with his students' problems resulted in a study by psychiatrists at Oregon Health Sciences University. The study carefully safeguarded the identity of the participating teenagers, which explains why Sovanna Sang's real name can't be used. It also unearthed information that may prove useful in understanding and treating traumatized refugees, combat-fatigued war veterans, disaster survivors, rape victims and other sufferers of violence worse than the human psyche can bear. In the year since its publication the study has been quoted in The New York Times and has been featured as an important source in a book written for relief workers who must treat traumatized children.

More important, perhaps, the lessons learned from one small Cambodian girl and her classmates have upset longstanding assumptions about the victims of violence and what it takes to survive unspeakable horror.

Dana Olsen/Northwest Magazine

A student listens to Dan Dickason, right, the teacher whose work with Cambodian refugees led to the OHSU's pioneering study of their traumas.

At a picnic one of the Cambodian girls found a dog bone sticking out of the ground and began to scream with hysterical terror. Later she couldn't sleep, couldn't eat. That was 1983, 4½ years after the killing ceased.

Dickason knew a young man who had hidden in the forest. His hair grew down his back; he wore the same pair of pants for two years. He knew where his mother was. He went there once a month, at night. She would cry; she always thought he was dead. Years later, in high school in America, he didn't do well. Out of school, he didn't eat, was growing thin. He sat and stared.

Some of the teen-agers couldn't keep jobs. Couldn't follow through on anything. Did not believe in the future. When someone asked Sovanna Sang how long she might live, she smiled ruefully and said, "Maybe I'll die tomorrow."

Dickason thought he'd better seek help. He and Karen Klug, his supervisor, contacted the Indochinese Psychiatric Clinic, at Oregon Health Sciences University. Meeting with Dr. J. David Kinzie in his office on the fifth floor of University Hospital South, they found out that nobody knew how to treat such problems in children. Little was known about the effect of trauma on youngsters.

At first Kinzie, a clean-shaven, triangular-faced man with scattered silver threads in his dark brown hair, wasn't too interested in Portland's Cambodian teenagers. As director of the Indochinese Psychiatric Clinic, he ran a team of nine mental health workers who since 1978 had served 470 of the 8,000 Indochinese refugees in the Portland metropolitan area. The clinic had 50 patients suffering from Post Trauma Stress Disorder, most of them Cambodian. The staff didn't need any new patients.

Then Kinzie thought of doing a study. The additional victims wouldn't be new patients; they'd be respondents. He ran into Dr. William Sack, head of the child psychiatry section, and mentioned the Cambodian children to him. Sack thought the study an excellent idea. The study team would need a child psychiatrist, and he was the man.

The psychiatrists knew what to expect. Yet there were surprises. Although the teen-agers had been hurt as badly as the old people, they didn't ask for help. They suffered in silence. Kinzie remembers the interviews as acutely painful. The children sometimes cried as they described the routine horrors of their lives.

The psychiatrists soon realized that these interviews flew in the face of one of the basic tenets of psychiatry — the belief that talking helps. In fact, talking about these memories usually made things worse. It brought on headaches, insomnia, intrusive dreams and memories of awful scenes. They were consciously expending great energy, Kinzie learned, suppressing those exact memories.

So every interview was painful all around. The youngsters did what they were asked to do, at great cost to themselves. The psychiatrists could offer therapy — four of the respondents became patients later, and a few more found other psychiatrists. But even if they had become patients, says Kinzie, "short-term therapy has no place in this disorder. If you open this Pandora's box, you damn well better know what to do about it."

The psychiatrists went at it slowly, gently, warning the Cambodian boys and girls to back off whenever they wanted. They hoped that they would learn enough to balance the ripping-off-a-bandage pain.

The study went well. Using statistical models for human behavior, a recently developed method for quantifying mental disorders, it used an all-inclusive scale called the Children's Global Assessment Scale that rated a child's symptoms and responses. Based on this measure, the researchers then compared notes, quantified the data and fed it to the computer. They had exact percentages of how many of their subjects had recurring dreams (50), were easily startled (50), had nightmares (55), suffered headaches (65), were ashamed of being alive (70). The percentages also showed how many saw people killed (43), had members of their group escaping to Thailand killed (68), described the beating of themselves or other family members (38), recalled "looking like a skeleton" (68), saw corpses (100).

The young survivors show overt signs of almost none of this. No schizophrenia, drug or alcohol abuse, antisocial behavior or conduct disorders. No rebellious, pre-delinquent teen-age behavior. In fact, the response was the exact opposite: Emotional withdrawal, daydreaming and non-participation in class were the clues to their inner psychological turmoil.

Then out of the computer popped an insight that no one had foreseen, identifying an inverse correlation between incidence of post-trauma stress disorder and living with any member of the victim's nuclear family. Being with a single brother or sister did the trick. Only half of those living with a family member suffered the disorder, while 95 percent of those bereft of family did.

Another finding was almost as surprising. The study turned up no difference between young refugees who lived in foster homes with unrelated Cambodians and those who lived in foster homes with unrelated Americans. Almost all suffered. Curiously, they found no relationship between the severity of the hardship and the severity of the symptoms later. Apparently, once a certain level of trauma is reached, the full effect will be felt: nightmares, difficulty sleeping, being easily startled, depression, lack of energy or interest, brooding, feelings of self-pity, pessimism, remorse for having survived, shame at being alive.

"Someone to cling to," Dan Dickason says, "someone to count on makes the horror less. Even a letter from a relative far away makes the symptoms disappear." But even that is sometimes not enough.

Is the protective power of even a single family member a human instinct or specifically Cambodian? Both Sack and Kinzie cautiously believe it may be a human trait. Of course, they are studying the most extreme cases. Total trauma, heaped beyond human endurance upon tender children of a country with a culture centered on the family. Yet, the statistics seem clear. Could this window into the traumatized mind cast light on therapy for rape victims, returned soldiers, freed slaves, orphans? Would a study of traumatized Vietnamese or any group of ex-G.I.s show the same results? Or do the results apply only to Cambodian children?

Three years later, Kinzie's team is re-interviewing the same teen-agers. They hope to continue to do so all their lives, if possible, and then follow the children of these children. The study was presented at the 1984 annual meeting of the American Academy of Child Psychiatry and was published in 1986 in the academy's journal.

In Kinzie's opinion, the agony of the interviews may prove to be worth it. "The Cambodians are teaching the rest of the world," he says. "From them, we are learning how to treat trauma. It is a real giving."

For those who know survivors of the Pol Pot tragedy, Kinzie warns strongly: Don't encourage them to tell their stories. "Even performed by experts, short-term therapy doesn't relieve, and often harms, the victim." Respect the person's privacy, he urges. "Meet his or her needs, treat them as human beings." Turn the sufferer's attention to bright and present subjects.

The stories above are condensed.

Doernbecher

'Preemies' focus of loving attention

Columbian, Jan.

PORTLAND — The baby lay under the warm rays of a heater and wiggled his tiny, naked body as a nurse adjusted the tube leading from a breathing machine into his windpipe.

Dr. Gerda Benda gazed down at the struggling infant and calmly told his story. He was born two months early and weighed only 3½ pounds. He was fighting pneumonia and other infections.

Benda moved on to check a baby girl lying next to teddy bears in a nearby bassinet. Like most of the infants in the Neonatal Intensive Care Center at Doernbecher Memorial Hospital for Children, the girl was born early, before her organs could develop fully.

There are others, too: jittery, bawling infants addicted to drugs and sick babies who die within hours or days of their births.

Benda, 48, of Vancouver, is acting director of the Neonatal Intensive Care Center, part of Oregon Health Sciences University. She also is an associate professor of pediatrics. Born and educated in Germany, she was one of the first board-certified neonatologists in the United States.

In her 21 years at the university, she has seen neonatology, the care of infants, develop into a sophisticated medical specialty and gain a niche of its own in the field of pediatrics. She helped design the neonatal intensive care center at the university. One of three such centers in Portland, it has 30 to 40 patients at a time.

"Their average stay here is two weeks, but they may stay for 10 months if they have to," Benda said. "They'll stay here as long as it takes to get well . . . or to die."

Ten percent to 15 percent of the babies in the center die, but the statistics for survivors get better all the time.

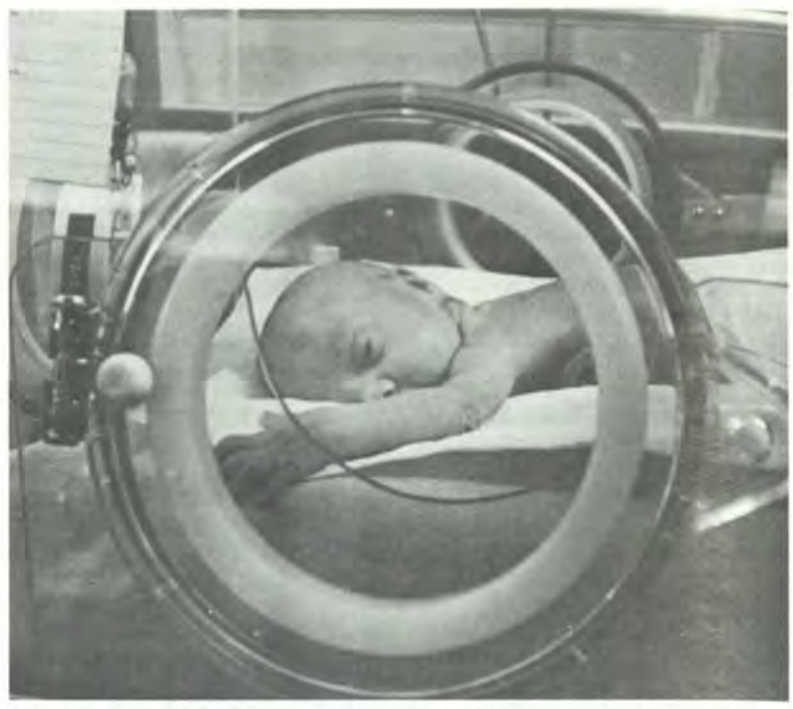
"When I trained (in the 1960s), 2-pound babies didn't live," Benda said. "Now 80 percent of them do."

Many of the premature babies are shockingly tiny: a boy with spindly legs and almost skeletal hands; a girl whose bones are so soft that her chest caves in with each shallow breath.

But hope, fortunately, runs deeper than appearances.

"It's very happy work," Benda said. "Working with infants is usually a joyful event. Parents are hoping for a healthy baby, and if the baby isn't healthy, we try to do whatever is necessary. It's a very optimistic job."

The babies' parents are welcome in the unit around the clock. *(continued on page 9)*



Tiny premature babies are given a strong start in life thanks to the efforts of Dr. Gerda Benda and her staff.

Doernbecher Hospital renovation begins

Oregonian, Dec. '86

A parade of 60 birthday cakes lighted up a faded unit Wednesday morning at Doernbecher Memorial Hospital for Children and marked the beginning of a $1.2 million renovation of the 60-year-old hospital's Pediatric Intensive Care Unit.

"We will be demolishing the spot where we are standing," David Witter, director of Oregon Health Sciences University Hospital, told about 200 patients and former patients, staff, volunteers and physicians Wednesday at the birthday party for the children's hospital.

Renovation of the unit — located on the 13th floor of University Hospital — is the first step toward renovation of Doernbecher and an overall plan to upgrade and improve access to the hospital's facilities, Witter said. Doernbecher is part of the Oregon Health Sciences University.

The new Pediatric Intensive Care quarters will offer improved isolation capabilities and more family-support space.

In addition, it will permit the expansion of the pediatric critical care transport system and incorporation of pediatric thoracic surgical patients, Witter said.

Major funding and support for the Pediatric Intensive Care Unit remodeling is being provided by the Doernbecher Children's Hospital Guild, a group instrumental in establishing the hospital 60 years ago.

In 1926, Doernbecher opened as the state's first hospital dedicated to the special medical and surgical needs of children. At that time the hospital had 80 beds, five volunteer physicians and a waiting list of patients.

Now the facility is licensed for 107 beds with 500 doctors and nurses providing care for more than 20,000 Northwest children each year, Witter said.

The hospital's 60 years is marked by many accomplishments that have brought it national and international attention:

- 1951, the beginning of the state's regional referral system for children with heart defects. The center diagnoses and treats babies with congenital heart defects.
- 1958, the first Oregon open-heart surgery, on a 5-year-old boy.
- 1959, first twin-to-twin kidney transplant at Oregon Health Sciences University, the 10th kidney transplant in the world.
- 1963, opened the Cystic Fibrosis Center and laboratory for testing children for asthma, cystic fibrosis and congenital lung disorders of every type.
- 1965, first genetic clinic in the state opened at the medical school to provide special care for Doernbecher children with inherited genetic defects, and a counseling service began.
- 1975, Doernbecher made Oregon the first state to begin routine screening of newborns for hypothyroidism and the first state to develop a newborn screening program.
- 1978, first hospital in the United States and one of only five in the world to adopt Continuous Ambulatory Peritoneal Dialysis, a form that allows children to receive kidney dialysis at home.
- 1982, the first successful bone-marrow transplant in Oregon.
- 1985, Doernbecher pediatrician instrumental in the development of a growth hormone.

Former Doernbecher patient Amy Ryan cuts ribbon to celebrate newly expanded Pediatric Intensive Care Unit. By her side are Alyce Cheatham, president of the Doernbecher Foundation, and David Witter, OHSU interim president.

Former Doernbecher patient returns to help celebrate renovation of intensive care unit

Oregonian, May

Amy Ryan of McMinnville returned Wednesday to the place her life was saved a year ago, not once but three times.

The 14-year-old was back to cut a red ribbon across a doorway in a ceremonial opening of the expanded and modernized Pediatric Intensive Care Unit at Doernbecher Children's Hospital, part of the Oregon Health Sciences University in Southwest Portland.

Her participation seemed appropriate because she exemplifies the hoped-for result of the health care the unit offers to critically ill children.

It was April 1986 when Amy, thought at first to have a case of flu, became so sick that her doctor in McMinnville called for the Oregon Health Sciences University emergency transport system to rush her to Doernbecher.

A few days later, as doctors tried to diagnose her illness, Amy's heart stopped. Three times the pediatric health team revived her, in what her distraught parents, Steve and Barbara Ryan, regard as a miracle.

"Obviously, Amy came very close to death," said Dr. Michael Miller, professor of pediatrics and pediatric infectious disease consultant at the hospital.

"She came to us extremely ill, with all the symptoms of sepsis, an overwhelming infection," Miller said, "but we never were able to find out what was causing her fever and rash."

A year later, the McMinnville High School student is healthy and active, swimming and playing softball and volleyball.

"You look terrific," Miller told her when she arrived at Doernbecher for the ribbon-cutting.

"I feel terrific," Amy replied, although she had a slight cold.

The pediatric unit Amy helped to open Wednesday covers 4,000 square feet, compared with the current 1,800-square-foot space where beds and patients have been packed together amid a jumble of wires and machines.

The larger area is a major improvement, said Dr. Robert Neerhout, chairman of the Department of Pediatrics. It will allow doctors and nurses to operate more efficiently and provide more room for family members to visit.

Officials cited as another improvement the columns used to consolidate most of the needed medical equipment in each room. Oxygen, suction and ventilation machines can be plugged into one large column, eliminating much of the wiring and clutter that had surrounded patients' beds.

The renovation project began in the fall and cost $1.2 million, funded entirely by private contributions. About $750,000 was donated through the Doernbecher Children's Hospital Guild and Children's Miracle Network Television. The rest came from private donations to OHSU in support of Doernbecher.

Doernbecher's pediatric unit was opened in 1956, the first of its kind in Oregon. The 107-bed facility has specialists in all major areas of pediatrics and 500 doctors and nurses to take care of patients there.

Camp Doernbecher gives kids chance to exchange worries of illness for delight of outdoors

Oregonian, Nov.

OTIS — Five-year-old Sara Gaskey has spent 280 days in Doernbecher Memorial Hospital for Children being treated for leukemia. This weekend her father watched as she left again with her doctors and nurses.

Only this time, there was neither the worry nor the pain.

"It's good for the kids," Sara's father, Eldon Nelson, said Saturday as he waved at the ferry pulling across the Salmon River estuary toward Camp Westwind at the Oregon coast.

This weekend, 38 former Doernbecher patients — joined by siblings, doctors and nurses — attended Camp Doernbecher, held at YWCA's Camp Westwind for the second year.

The children attending the free camp ranged in age from preschoolers to teenagers.

"The idea was to have it be a day where no one got stuck with needles or underwent painful procedures," said Dr. David Waters, who started the camp last year and came from Milwaukee to attend the camp this year.

The two-day, one-night camp is a "a celebration of sorts," a chance for the doctors and their patients to get away from the tense atmosphere of a hospital ward, said Waters, a pediatrician.

Most of the 38 children here have had more than their fair share of tense times.

Some have leukemia or cystic fibrosis, and others have cancer. Some walk on crutches, and others move about in wheelchairs. Some undergo chemotherapy, which can make their hair fall out; others have hemodialysis, which tends to stunt their growth.

The stories above are condensed.

Financial vitality at university breathes life into Oregon's economy

Portland Business Today, Jan.

The Oregon Health Sciences University has emerged as one of Oregon's most promising economic hopes.

While Oregon's lumber and computer industries have slumped, OHSU and its 5,300 employees and 2,000 students and residents have contributed nearly $500 million to the regional economy this year alone. Clearly, OHSU is an outstanding investment for Oregon taxpayers.

During the 1985-86 budget year, OHSU received $52 million from the state general fund. During the same period, OHSU attracted about $148 million in non-state funds to meet its $200 million budget. A conservative estimate of the multiplier effect means that OHSU returns about $10 directly to the Oregon economy for each state tax dollar it receives.

Despite the recent downturn in construction during the past few years, OHSU has been involved in more than $200 million in construction projects on Marquam Hill that have employed some 700 construction workers. Projects include the $20 million Institute for Advanced Biomedical Research and the $130 million Veteran's Hospital complex with a $7 million pedestrian bridge.

Funds also have been allocated for four other major facilities, including $17 million for a regional eye center, $20.4 million for the Biomedical Information Communication Center, $4.7 million for the Oregon Hearing Research Laboratory and $2 million for the Center for Occupational Disease Research. In addition, $22 million in capital improvement projects were approved in November.

Future plans call for building a center for the study of aging and a center for the application of advanced biomedical technology to clinical practice.

The OHSU Foundation was created in 1970 as a non-profit corporation to help the university seek resources from the private sector to supplement the state's 27 percent contribution to the university's budget.

Since 1982, the foundation's assets have increased from $8 million to $31.2 million in 1986. Recent donations to the foundation include an anonymous gift of $650,000 for the School of Nursing; a bequest from the Beatrice Gerlinger Estate for $3.6 million for scholarships, loans and medical research; a gift of $6.8 million from Howard and Jean Vollum for the IABR; a Board of Overseers contribution of $700,000 for the IABR atrium; and a donation of $800,000 from the OHSU Ophthalmology faculty for the regional eye center.

As Portland's third largest and Oregon's seventh largest employer, OHSU has a substantial impact on the economic vitality of the area. Through the purchase of goods and services from about 500 different vendors, the OHSU returns $42 million directly to the region.

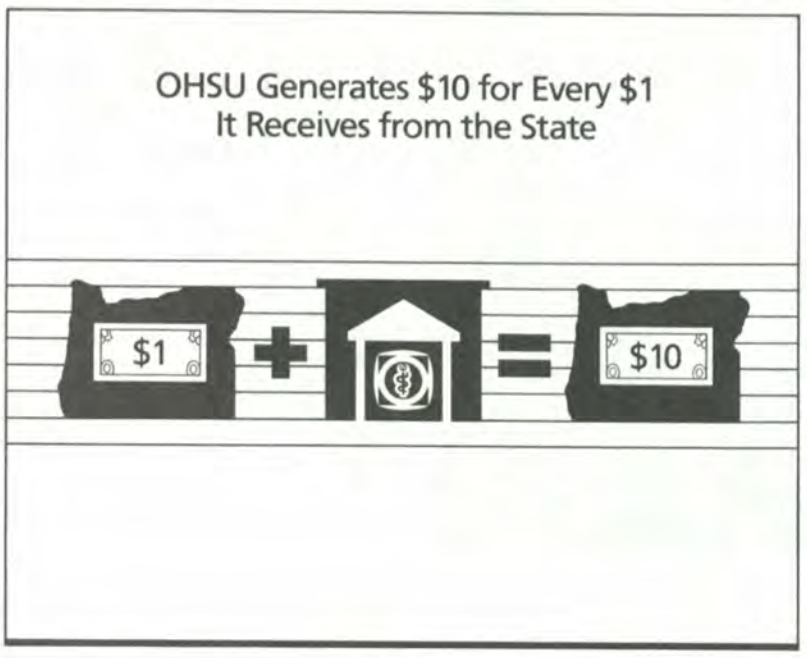
OHSU also successfully competes with some of the nation's most prestigious institutions for coveted research dollars. OHSU has seen the acquisition of research and training funds from outside Oregon increase by 63 percent, from $18 million to $31 million, between 1985 and 1986.

A partial list of OHSU's major research, training and public service grants includes: Respiration During Development, $2.9 million; Clinical Center for Early Intervention for Chronic Obstructive Pulmonary Disease, $3 million; Mechanism of Injury and Repair in Ischemic Stroke, $2.8 million; Dietary Lipids, $2.8 million; General Clinical Research Center, $5.2 million; Interdisciplinary Training Project, $2.7 million; and the Oregon Hearing Research Laboratory, $4.7 million.

Dr. Leonard Laster, president of OHSU, said that the biomedical research being conducted not only will attract future research dollars, but also will spin-off new products that can be manufactured in Oregon.

While OHSU receives only about 27 percent of its budget, through state appropriation, this provides a vital catalyst for attracting the tenfold increase in dollars OHSU receives and spends from non-state sources each year.

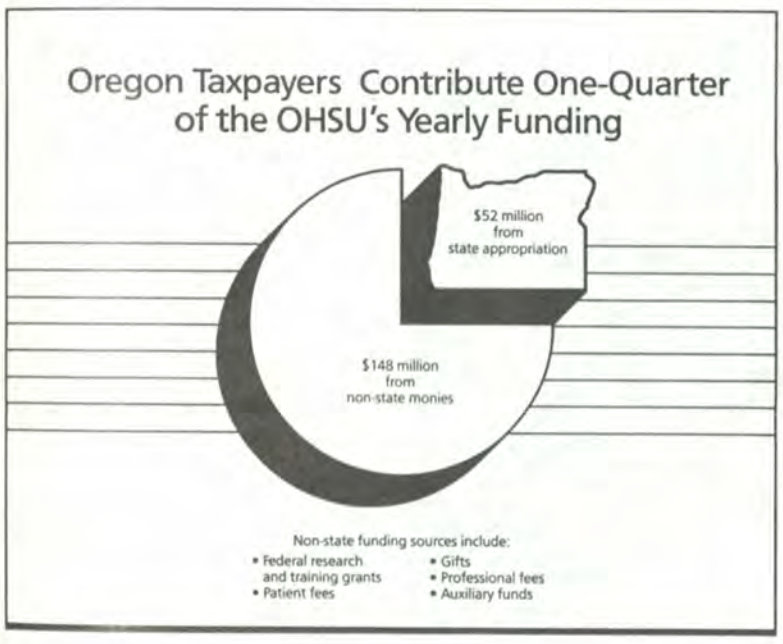
OHSU enjoys a vital relationship with the state. In turn, OHSU provides an outstanding value for the people of Oregon.

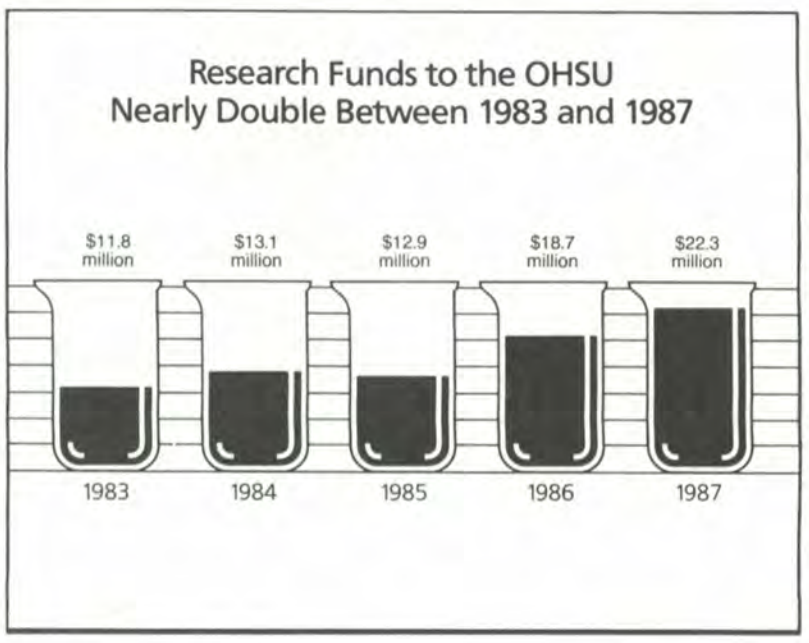


Bottom left: Only one-fourth of OHSU's nearly $200 million budget comes from state allocations. The remaining money comes from such non-state sources as federal research and training grants, fees and gifts.

Left: This year, the OHSU received $52 million from the state budget allocation. For each of those dollars, the OHSU returns $10 to the state. OHSU will return $500 million to the state on its $52 million investment.

Below: OHSU has succeeded in competing for research and training dollars. In 1986, funds totaled $31 million.





Community and state support crucial to university's continued progress

Portland Business Today, Sept.

Oregon Health Sciences University has evolved into a nationally known research institution, but the community and state must continue to support the facility for it to reach its full potential, said the university's departing president.

"Ten years ago very few people understood what this institution was all about," said Leonard Laster, OHSU's president, who will leave Nov. 1 to become chancellor of the University of Massachusetts Medical Center in Worcester.

But through a conscious effort, such as the Marquam Hill Lectures, publications, research convocations and campus tour programs, people have become more aware of OHSU, Laster said.

During Laster's nine-year tenure, the university's campus went through tremendous changes, both physically and on a research level. The $130 million Veterans Administration Medical Center came on-line, and $10 million in general hospital improvements are under way. Funding for research and training has increased 78 percent from 1985 to 1987 — from $18 million to $32 million.

"There's more than $200 million in construction money that has come from these guiding principles at a time when the state was in real trouble financially," Laster said. Funds for the projects came from the federal government, private donations and "the old fashioned way — we earned it," he said.

State funds for construction were not awarded until Gov. Neil Goldschmidt came into office in January, Laster said.

Plans also are under way for three other facilities on the campus, including an $18.5 million regional eye center, scheduled to break ground next year; the $20.4 million Biomedical Information Communication Center; and a five-story, $17.1 million expansion of the Basic Science Building. A $7 million pedestrian bridge connecting the hospital and the Veterans Administration Medical Center also is planned.

Laster's dream of a new biomedical research institute at the campus also came true during his presidency. The $20.4 million Vollum Institute for Advanced Biomedical Research, dedicated to the use of molecular biology in brain research, came on-line in April.

"We're becoming one of the major centers on how the brain works," he added. "Excitement is what feeds a place like this."

The institute has attracted several experts on brain research, including Dr. Al Lewy, an expert on how light affects the brain; Dr. Donald Trunkey, a national expert on trauma, particularly brain trauma; and Dr. Edward Neuwelt, a national expert on the treatment of brain cancer.

"We are nationally known," Laster said, adding previously it was difficult to attract people to the university. It now has staff from Harvard, Yale, Columbia, MIT and Stanford.

"There's pride, there's a belief now that you can reach for the stars and get closer."

In addition to boosting construction activity, the university injects money into the local economy — it is the Portland area's third-largest employer and the state's seventh largest. Its 5,200 employees and nearly 2,000 students and residents have contributed close to $500 million to the regional economy this year alone, according to university statistics.

"That's . . . a lot of taxes," Laster said.

It also attracts visitors, conferences and other activities that bring money into the state, he noted.

"We have turned a corner here from a time when people thought about closing this place . . . to a time when they talk about economic development," Laster said. "We are becoming the jewel in the crown."

'Preemies' continued: university staff welcomes parents in unit around the clock

(continued from page 8)

"They have total access to their babies," Benda said. "They see what we are doing and ask questions. If things go right, they'll be very thankful and happy. If not, they'll understand better than if they're never allowed to set foot in this place."

Benda's work involves not only the treatment of babies but counseling, reassuring and informing their anxious parents.

Benda is disturbed that many women do not get prenatal health care, usually because they cannot afford to see a doctor. Any problems during pregnancy not diagnosed or treated, often result in harm to the baby.

Babies born to teenagers often have problems because the mothers' bodies are not developed well enough to carry and nourish a child, Benda said. The death rate for such babies is high.

She said she thinks the federal government somehow should assure that people get proper education about sex and medical care if they are pregnant.

While Benda can be outspoken on such issues, she is a warm, compassionate woman with a wealth of knowledge. Her face is framed by closely cropped, graying hair. She smiles readily and shares bits of humor with pediatric residents while making rounds.

Dr. Mark Ziegler, a fellow in neonatology, said Benda has "grown up with the field" of neonatology, which has existed only since the mid-1960s.

"I really respect her judgment. She's been around, and she's seen everything," Ziegler said. "If there's a child with a real puzzling problem, she has 20 to 25 years' experience to fall back on, and that's invaluable, really."

"You can call her about anything, day or night. A lot of people aren't like that," said Dr. Kathleen Schatzel, a pediatric resident. "She stays calm under stress, and she's really good."

She also knows first-hand what it is like to have a baby in the neonatal intensive care center. One of her twin sons had to have several surgeries for congenital problems.

The stories above are condensed.

Dr. Roger Illingworth investigates lovastatin, a cholesterol-lowering drug that has reduced the incidence of death from cardiovascular disease among his patients.

Lipid studies optimistic

Medical World News, Jan.

An investigational lipid-lowering drug continues to rack up an impressive record as a therapy for familial hypercholesterolemia (FH).

In studies here and elsewhere since 1982, lovastatin (Mevacor, Merck Sharp & Dohme) has lowered total and low-density lipoprotein (LDL) levels by an average of 40% in patients with heterozygous FH. As a result, patients have had a significant decrease in their risk of early death from coronary artery disease.

With 85 FH patients on lovastatin, Dr. D. Roger Illingworth has one of the largest cohorts in this country. Most of them get 20 to 40 mg of the drug twice daily, and about 60 also take a second drug, usually a bile acid sequestrant such as cholestyramine or colestipol. Together the drugs have lowered patients' cholesterol levels by as much as 54%, he reported last fall at a conference in Helsinki, Finland.

FH patients have cholesterol levels as high as 520 mg/dl, but within four weeks LDL levels usually fall by about 40%. With the drug combination, patients can maintain cholesterol levels in the low 200s, says Dr. Illingworth, an associate professor of medicine at Oregon Health Sciences University and co-director of the Oregon Lipid Disorders Clinic.

The drug has lowered cardiovascular disease mortality among Dr. Illingworth's patients and has effected tendon xanthoma regression in patients' hands. He's still trying to determine whether the drug has a similar effect on Achilles tendon xanthoma formation.

"The drug has a good safety profile compared with other cholesterol-lowering agents," says Dr. Illingworth.

Late last year, Merck officials submitted a new drug application for lovastatin to the FDA.

Lovastatin is one of the two HMG CoA reductase inhibitors under investigation. The other, compactin, is being studied in Japan.

Studies shed new light on winter blahs

Los Angeles Times

Soon the lazy days of summer will be gone. It is not just those people who dislike snow and cold who fear the coming winter; those who live in warmer areas may also view the coming winter with apprehension. The reason is that a large percentage of sun worshippers can develop severe winter depression.

This condition is characterized by a need to oversleep and overeat, a strong craving for sweets and by a general feeling of malaise.

These people who complain to their physicians about how they feel are usually told to find some activity to keep busy and look forward to spring, even though it is months away.

Light's Effect on Gland

In 1980, Dr. Alfred Lewy of the Oregon Health Sciences University reported in the journal Science that exposure to sunlight and bright artificial light will suppress the pineal gland's secretion of human melatonin. This suggested that light could affect human circadian and seasonal rhythms.

These rhythms are usually synchronized to the natural light-dark cycle. Seasonal rhythms are cued by the changing length of daylight throughout the year and are unaffected by the use of ordinary indoor light.

Lewy then used lights of extreme intensity on a man who for 13 years had developed a severe depression between the winter solstice and the vernal equinox. The patient was exposed to intensive light during the first week of December 1980. After four days of treatment, he no longer suffered from symptoms of depression. Correlation eventually demonstrated that the light suppressed the production of melatonin in the pineal gland.

Lewy's original work has been followed up by two larger trials by the clinical psychobiology branch of the National Institute of Mental Health. The use of intensive light on patients with seasonal affective depression proved to be most positive.

Dr. Al Lewy

New drug study

Scribe, July

Oregon Health Sciences University has been chosen to participate in a $10 million study of a new drug therapy for Parkinson's disease. Stephen Gancher, M.D., assistant professor of neurology, will direct OHSU's participation. The study is "an attempt to affect the progression of Parkinson's disease rather than using traditional therapies that merely relieve symptoms," Gancher said.

Funded by the National Institutes of Health, the five-year research study involves 800 patients at 28 locations in the United States and Canada and is the largest grant in size and scope ever funded to research Parkinson's disease.

OHSU researcher honored after decades of study on nutrition, heart disease

Oregonian, April

Two scientists will be honored Monday with Discovery Awards for their contributions to biomedical research in Oregon.

Honored by the Medical Research Foundation of Oregon will be Dr. William E. Connor, head of the Oregon Health Sciences University division of endocrinology, metabolism and nutrition, and Brian W. Matthews, a member of the University of Oregon Institute of Molecular Biology and a professor of physics.

In 37 years as a physician and researcher, Connor's contributions to America's nutritional awakenings — especially the effect of fats — has brought him international recognition. In May 1985 he and an Oregon Health Sciences University team in clinical nutrition and lipid metabolism published a landmark paper in the New England Journal of Medicine. It established that eating Omega-3 fatty acids, found in salmon and oily fishes, has a blood-thinning effect that helps to prevent clogged arteries. More recently, he is studying the effects of Omega-3 deficiency in monkeys.

And Connor and his wife, Sonja, a dietitian and OHSU research assistant professor of medicine in the division of clinical nutrition, have written three diet-recipe books promoting a new low-cholesterol American diet to assist in preventing coronary heart disease and related illnesses.

The evolution in Connor's way of eating occurred in the mid-1950s when as an intern he came in contact with many patients who had severe blood vessel and heart disease. And, recognizing that several of his patients had very high blood-fat levels, young Dr. Connor wondered how the patients' diet might affect their coronary heart disease.

It was the right time for asking such a question, because methods of measuring lipid proteins and blood-fat levels were emerging and many scientists were putting that technology to use.

"But my bent was going to be not the biochemistry, but the effects of nutrition — diet," Connor said.

It was while he was at the University of Iowa College of Medicine that Connor embarked on experiments that would span the next 30 years. He began with egg yolks. In the early 1960s his first study helped set the stage for the thinking that foods high in cholesterol (egg yolks, butterfat, cheese) should be avoided to help prevent coronary heart disease.

At Iowa and later at OHSU, Connor and his colleagues performed many experiments to determine, among other things, the effects of different types and amounts of fat on the body.

In general, Connor's work indicates that:

- A low-cholesterol, low-saturated-fat diet throughout a lifetime probably means a lower cholesterol level and less chance of developing heart disease.
- People who get coronary artery disease may with a change of diet be able to reverse the condition somewhat or stop its progression.
- The company the cholesterol keeps is very important. The kind of fat that is in a food, along with the cholesterol, may be an important consideration because saturated fat along with cholesterol elevates the cholesterol in blood, while polyunsaturated fats, particularly Omega-3 from fish, greatly depresses the cholesterol level and also the triglyceride level.

Matthews is best known for being the researcher who worked out the first genetic switch, a molecule that sits on DNA and recognizes special places to turn on and off. This important breakthrough could lead to methods of regulating genetic information as well as the treatment of genetic disorders.

Research intensifies locally and nationally on mysterious barrier that protects brain

NY Times News Serv., Aug.

The human brain converses with the entire universe, but it maintains a strange and stringent isolation from its own body.

Many substances that circulate in the blood hardly enter the brain at all. Some chemicals in the brain will not diffuse outward into the general circulation.

This strange selectivity is vital to the brain's proper function. But recently scientists have learned much about how to manipulate it to help the whole body fight disease.

The selectivity is achieved by the blood-brain barrier, a physical and chemical entity that keeps the brain stable in a body whose blood chemistry can have drastic momentary ups and downs. The barrier is a vital defense, but it is also a serious problem in treating diseases such as AIDS, some cancers and other diseases that invade the brain.

Important drugs that could be useful against disease in the brain do not easily penetrate the barrier. Other diseases that might be better understood and treated through study of the blood-brain barrier include Alzheimer's disease and multiple sclerosis.

For years scientists virtually ignored the blood-brain barrier because there seemed to be no way of dealing with it. Today it is a subject of intense research. Specialists see it as a vital point of attack against deadly diseases and as a source of clues to better understanding of the most complex single thing that has ever existed on earth — the human brain.

A seemingly moderate treatment, infusion of a heavy dose of a special sugar into an artery leading to the brain, can open the barrier briefly so that otherwise prohibited substances can enter.

This strategy is credited to Dr. Edward A. Neuwelt of Oregon Health Sciences University and Dr. Stanley I. Rapoport of the National Institute of Aging, a unit of the National Institutes of Health in Bethesda, Md.

Recently Neuwelt tried this strategy in conjunction with drug treatment of cancer patients.

"His recent work suggests that chemotherapeutic drugs given in this way may contribute to regression or disappearance of the tumor," two researchers said in a recent scientific article.

The stories above are condensed.

OHSU School of Medicine celebrates 100 years of medical education

Western Journal of Med., Oct.

Just 100 years ago this fall, the inaugural class of the University of Oregon Medical School gathered for the first time in the school's lone building — a two-room converted grocery store in northwest Portland. Eight practicing physicians lectured part-time for little or no money. In all, 18 men attended classes in its one lecture room; cadavers were hauled through a trapdoor to the dissecting room above with a block and tackle.

Today that school's direct descendant, the Oregon Health Sciences University (OHSU) School of Medicine, is an integral part of a $200 million, 26-building academic health complex that includes schools of Dentistry, Medicine and Nursing, University Hospital, Doernbecher Children's Hospital, University Clinics (medical and dental), a Crippled Children's Division and a new research unit — the Vollum Institute for Advanced Biomedical Research.

Now located on a hilltop site, the campus overlooks the city of Portland. The school's student body has grown to 500. Faculty members now number 500, with more than 1,000 volunteer faculty.

In 1887 admission to the school required knowledge of the "common English branches, including reading, writing, spelling, grammar, geography, arithmetic and so forth." Today it involves at least three years of premedical study, entrance examinations, proof of character and personal interviews.

Training in 1887 lasted two years and had to include "two full courses of lectures and at least one course of practical anatomy and clinical instruction." Today the curriculum includes subjects such as medical genetics, immunology, microbiology and radiographic diagnosis. Under consideration are core courses that reflect societal concerns such as occupational diseases and a growing geriatric population in the U.S.

In 1887 medical research in Oregon did not exist in the modern sense. Bacteriology was just emerging as a field of medical instruction when the school was founded, and, until 1892, microscopes in the medical school lacked an oil immersion lens.

The OHSU School of Medicine today boasts spacious laboratories, the most advanced equipment and a vital research program.

Here, too, tomorrow's biomedical researchers can pursue master of sciences and doctoral degrees in anatomy, biochemistry, medical genetics, medical psychology, microbiology, pathology, pharmacology and physiology.

Also available are baccalaureate and master's degree programs in medical technology and allied health programs in advanced paramedics, dietetics, nuclear medicine, radiation therapy, x-ray and ultra-sound technology and alcohol counseling.

On the road to learning, early medical students led the way to modern health care.

Parkinson's experts dubious of experimental adrenal implant operation

Oregonian, April

The international scientific community is skeptical about an operation in which adrenal gland cells of Parkinson's disease patients are implanted in their brains.

Oregon Health Sciences University researchers and Oregon Parkinson's patient advocates are telling hopeful patients to wait for a proven approach.

Dr. Earl A. Zimmerman, chairman of the OHSU department of neurology, advises patients to wait until more is known about the surgery's safety and efficacy.

Science's hunt for a better way of getting at Parkinson's came in the late 1970s when a young drug addict's attempts to make the narcotic Demerol ended with a mixture that produced permanent parkinsonism. His mistake gave researchers the ability to create and try to reverse Parkinson's symptoms in laboratory animals.

Since the beginning of the decade, researchers have induced symptoms in animals, then tried to reverse symptoms with implanted brain tissue from aborted animal fetuses. Other laboratories did the same, only transplanting tissue from animal adrenal glands into animal brains. Fetal tissue worked best.

Some researchers turned to experimenting with the patient's own adrenal cells for transplant. Aside from skirting the ethical problems, transplantation of the patient's own adrenal cells eliminates the possibility of tissue rejection.

While comments in The New England Journal of Medicine and the Journal of the American Medical Association have been laudatory, they also pointed to unanswered questions surrounding the human experiments.

The writers' dubious responses match concerns of Zimmerman, a pioneer in brain research who in 1985 came to OHSU from Columbia University in New York. Zimmerman says the human experiment is "probably the single most important event in neurology this decade.

"Knowing what we know and having done research on this for five years, we think this is a relatively poor experiment to do in people."

Zimmerman said his laboratory and researchers at the new Vollum Institute for Biomedical Research at OHSU were seeking "a rational" Parkinson's treatment on the molecular level. They are in early stages of work that could result in a genetically programmed dopamine cell for implant in the brain. A second project might someday identify and find ways to manipulate tropic factors that could rejuvenate dying brain connections.

At the same time, OHSU's Dr. John P. Hammerstad, co-director of the movement disorders clinic, is principal investigator in a program with the Oregon Regional Primate Center in which researchers are using surgical methods to reverse induced parkinsonism symptoms in monkeys.

New artificial skin may provide 'second skin,' prove to be life saver for serious burn victims

Statesman Journal, April

A research team at Oregon Health Sciences University has developed a gelatinous artificial skin that can be used to form a life-saving second skin for burn victims.

The artificial skin is made from collagen extracted from calf hides. It is mixed with stabilizers and freeze-dried to a powder form, Dr. Peter Bentley, a research team leader, said.

The product is easy to use, he said: Simply mix it with water.

It forms a gelatinous sheet in the wound. Eventually it is absorbed and replaced by the body's skin cells.

The research team will start testing the artificial skin on humans next year. But it will not be widely available for several years.

For years, doctors have treated severe burns by covering the wound with skin from cadavers or from pigs. The skin of pigs is most like that of humans.

A special plastic called Biobrane also is used.

The drawback is that the body eventually rejects those as foreign substances.

What doctors are doing in using those substances is buying time to prepare skin grafts.

"We're trying to develop something that doesn't have to be taken off," Bentley said.

Bentley's research team devised a way to remove the part of the calf collagen that the body would recognize as foreign and make antibodies to fight. That was done by treating it with the enzyme pepsin.

"That way we feel we can put this stuff on people's bodies and not have it rejected," he said.

But for those who do, the gelatinous skin could be a lifesaver. It prevents loss of body moisture and fights infection. Both are major causes of death in victims of severe burns, he said.

Smokers can put their lungs to the test in national lung research program

Silverton Appeal-Trib., May

Have you ever wondered what shape your lungs are in?

Here is your chance to find out. If you smoke and are 35-59 you can go into the Oregon Health Sciences University (OHSU) in Portland for a free lung function test. Those who qualify may be invited to join in a national lung research program. Some may be offered a free program to help them stop smoking.

The OHSU has been chosen as one of 10 national medical centers around the nation to conduct one of the decade's major studies on cigarette smoking and heart disease.

The Lung Health Study will be offering the free screenings for the next 18 months to any smoker within 75 miles of Portland.

Dr. Sonia Buist, professor of medicine and acting head of the Division of Pulmonary and Critical Care Medicine and Dr. Joseph Matarazzo, professor and chairman of the Department of Medical Psychology, are the study's co-principal investigators.

"By taking a lung test a person gets an immediate indication of how smoking might have already affected the lungs," said Buist.

She pointed out that, although exercise does not reverse damage and repair to the tissue is virtually negligible, quitting smoking dramatically slows the loss of elasticity and allows the lungs to age at the same rate of the non-smoker.

"This slowing of the loss in pulmonary functioning could mean over a decade of increased pulmonary life for the ex-smoker," stated Buist.

Call (503) 22-LUNGS for more information.

Institute for Advanced Biomedical Research

Vollum Institute researcher pursues mysteries of brain, rock 'n' roll to balance love for science, music

Business Journal, July

Jim Douglass has learned how to balance his love for science and music. He conducts experiments in his laboratory at the Vollum Institute for Advanced Biomedical Research while listening to radio rock 'n' roll. And off the job, he plays drums for a rock group named for genetic materials in the brain.

Like the other scientists who work in the Vollum Institute at the Oregon Health Sciences University campus, Douglass seeks to understand the brain and its genetic makeup. His focus is opioid peptides, neurological substances associated with pain, stress and ecstacy.

Someday, Douglass' work may uncover the reasons for drug abuse or suggest cures for epilepsy, but at this point, the 32-year-old Midwesterner delves into microscopic secrets.

"Everything you do . . . it's all the little peptides, and it's all biochemistry up here," he says, pointing to his head.

Opioid peptides, derived from genetic materials, act upon the same receptors in the brain as opium and heroin. Scientists believe the brain produces opioids during pain or stress, triggering a natural pain suppression.

Scientists discovered the peptides in 1975, and though they can isolate them, they still can't explain how they work.

Douglass read about the mysterious molecules during the late 1970s, while earning his doctorate at Indiana University.

In 1981, he landed a post-doctoral research job studying peptides with Edward Herbert, a renowned brain researcher. Herbert moved from the University of Oregon to the Oregon Health Sciences University two years ago and served as the first director of the Vollum Institute. Douglass followed him to Portland.

Herbert died in February, leaving proteges such as Douglass in laboratories throughout the United States. Herbert's group is in the forefront of biomedical research, says Charles Sharp, program biochemist for the National Institute on Drug Abuse.

Douglass enjoys consulting with other medical professionals at the Oregon Health Sciences University, learning how opioids can work in the body. "It's really fun to take this high technology discovery and try to apply it."

The stories above are condensed.

Knee repair technique used to correct "clicking jaw" malfunction

Dr. Ralph Merrill, chairman of the Department of Oral and Maxillofacial Surgery, examines a TMJ patient.

Oregonian, May

Sometimes surgery has to wait around for technology to allow it to happen: Doctors think up an ideal way to resolve a problem, but the wherewithal is not available.

Such was the case with surgery to correct malfunctions of TMJ, the temporomandibular joint, the little connection that holds the lower jaw in place. (Put a finger in either ear, drop your jaw and you can almost feel it.)

A recent surgical solution to some TMJ problems came out of innovative technology first used in a popular knee repair operation.

Malfunctions of the jaw joint can be triggered by a variety of things including accidents, teeth grinding, jaw-clenching, muscle tension or arthritis. And symptoms can run a broad painful spectrum including head and earaches and pain in jaw muscles. Sometimes a problem makes itself known when upon awakening, a person finds that the mouth cannot open.

For a long time, the way to deal with malfunctions of this joint was to perform an elaborate procedure to correct a rather simple problem. To get at the joint, surgeons had to make an incision 1 to 2 inches long extending from the front of the ear up the side of the head.

After the patient's skin was flapped back, surgeons often saw a problem that could be corrected easily. They nudged the jaw back into place or flushed the area with fluid or perhaps broke off a rubber-band-like bit of adhesion.

But the patient was left with an unsightly scar. Moreover, recovery from surgery was uncomfortable and expensive. A patient could be in the hospital several days and experience post-operative sensations such as swelling, numbness and prickliness in the area of the incision.

Surgeons knew it would be better to go directly to the problem, but there was no way to gain easy access to the joint.

Enter the arthroscope, a small viewing instrument invented in Japan in 1917 and later miniaturized. At first it was a primitive diagnostic tool. Its first surgical application was not until the 1960s, for sports-related knee injuries. As with TMJ, correcting knee injuries had required extensive surgery, days of hospitalization and weeks of recovery.

"Several of us were looking into it in 1975, but the smaller scopes were not available at that time. The technology became available only recently," said Ralph G. Merrill, chairman of the department of oral and maxillofacial surgery at Oregon Health Sciences University. In the past 18 months he has performed about 300 of the arthroscopic TMJ surgeries.

The TMJ arthroscope is a lighted needle-like lens about 6 inches long. In surgery — it lasts about an hour and patients can go home the same day — arthroscopic instruments ranging from 1.9 to 2.7 millimeters in diameter are inserted through a small puncture in the skin in front of the ear. The scope projects a video image to guide the surgeon's hand.

Appreciative dental patient wins bicycle and sports healthy smile

Oregonian, March

Christina Brown, 9, got a new bicycle Wednesday after writing why she appreciated the dental students who have cared for her teeth.

The West Linn youngster is one of more than 500 children who have received dental care at reduced cost at Oregon Health Sciences University School of Dentistry this school year.

She was among the children who participated in a contest in which they finished, in 20 words or less, the statement, "I love my dental student at Oregon Health Sciences University School of Dentistry because . . ."

In Christina's case, she wrote about two dental students, Thomas Schlehofer and Brad Willcox, who fixed her teeth under clinic supervision.

She wrote, "Because they are the best dentists that I ever had. I wish they didn't have to graduate so I could have them longer."

Because the dental school has a service clinic, its patients are treated at fees reduced from private practice. Students who do the work are juniors and seniors.

Dr. Evelyn Strange, associate professor of pediatric dentistry and also in private practice, said the contest was conducted as a treat for patients and student dentists.

The bicycle presented to Christina at the clinic Wednesday was purchased from a dean's fund.

Ten children, ranging in age from 6 to 13, received honorable mention for their entries. They were given "diplomas," juice and an apple. Those youngsters and their comments include:

Carolla Yap, 11, Oregon City: "They are the most caring people. They treat us good and they teach us how to look after our teeth."

Anita Johnson, 10, North Portland: "Because they put my teeth back in good health for me. They don't rush. They take time and give good care."

Brandon Erkenbeck, 6, Gladstone: "Because he gave me silver teeth just like I wanted."

Dr. Hank Van Hassel, dean of the OHSU School of Dentistry, presents bicycle to Christina Brown, 9, winner of contest.

Sir Michael Williams, 7, Northeast Portland: "He cleans my teeth and makes them so shiny you need sunglasses to look at them."

Tyler Mason, 10, Northeast Portland: "He doesn't just want to get the job done. He wants my teeth to be the healthiest they can be."

Rama Olson, 9, Southeast Portland: "Because he fixes my teeth and if he didn't fix my teeth, I wouldn't have any. He holds my hand when he gives me a shot."

Sheryl Ferlan, 6, Molalla: "Because he always gives me hugs and says where's my smile."

Courtney Silvester, 4, Beaverton: "He helped me feel comfortable and let me play with the headrest on his chair. I threw it over the chair and onto the floor."

Ernie Robinson, 8, Northwest Portland: "They know what they are doing in my mouth and it's not like Bill Cosby said."

Growing good teeth: a childhood primer for strong teeth and gums that last lifetime

Northwest Magazine, April

Bringing up baby to be a healthy person means paying attention to details. And what detail could be more important than helping the child build a firm foundation for that essential part of every personality, the perfect smile?

The notion that good teeth and gums begin in infancy is a relatively new concept. When most members of the baby-boom generation were children, the emphasis in dentistry was on preventing cavities in the school-age years. That emphasis still is there, but the difference is that dental researchers now know that a healthy mouth in the earliest years can lay the groundwork for what is to follow.

Although it is true that the primary teeth are going to fall out and be replaced by permanent teeth, baby teeth *do* stick around until long after the baby no longer is a baby — often not falling out until the child reaches the age of 6. And some primary molars are still intact until age 12 or 13. If decay occurs in the first years of life — and it can, and it does — the infant's teeth may break. Primary teeth that do not last for their normal life span often leave a legacy of problems.

Pediatric dentists say the time to start cleaning infants' mouths is immediately after they are brought home from the hospital. At first, use a damp washcloth or gauze to clean the mouth; once the baby has more than four teeth, substitute a soft toothbrush. Clean the teeth and gums after every feeding, and — to avoid nursing-bottle mouth — use water when giving the baby a nighttime bottle. By age 1, try to wean baby from the nighttime bottle if possible.

Dental visits should start early — no later than age 3, and sooner if decay is evident, says Arthur E. Retzlaff, professor and chairman of pediatric dentistry at Oregon Health Sciences University. Retzlaff says the use of fluoride has cut tooth decay markedly in recent years and is the most important means of decay prevention.

In areas where water is not fluoridated — such as in Portland — parents should consider giving their children fluoride tablets or drops, as well as topical fluoride treatments at the dentist office.

Baby boomers do well to place high priority on dental fitness, keep firm grip on their teeth

Northwest Magazine, Feb.

In a recent Doonesbury comic strip, the deejay Mark asks his on-the-air guest, "So, what are baby boomers concerned about these days?" Without missing a beat, the expert retorts, "Gum disease, Mark."

Young adults would do well to be concerned. Periodontal disease is second only to the common cold as the most prevalent of all diseases. Half the population is afflicted by the age of 30; by age 40, the figure skyrockets to 80 percent. Three out of four adults older than 35 have some form of gum disease.

One problem is that in its early stages periodontal (peri = around; odont = tooth) disease may have few symptoms. The gums may bleed a bit during brushing, but many people accept a pink tinge on their brushes as normal. They should not. Redness, puffiness and bleeding around the gums are an early symptom of bad gums to come.

If toothbrushes were used — properly and often enough, at least daily — much of our silent epidemic could be laid to rest, according to Donald F. Adams, chairman of periodontology at the School of Dentistry at Oregon Health Sciences University. Adams says gum disease is common because plaque is common; plaque is a sticky film that forms daily on the teeth as a result of bacteria. If plaque is not removed every 24 hours, it calcifies to form a much harder substance called calculus or tartar.

Calculus does dirty deeds to the gums. This stubborn surface, which can be removed only by dentists or hygienists, forms layers of plaque, which cause inflammation of the gums. Plaque accumulates most readily at the edge of the gums where they meet the teeth.

If enough plaque and calculus are allowed to settle in, pockets form, providing a perfect environment for bacterial growth and destruction of tissues supporting the teeth and bone. If enough tissue is allowed to dissolve, the tooth loosens or shifts and eventually may fall out because of lack of support.

The stories above are condensed.

Crippled Children's Division

Autism: lifelong brain disorder puts children on the other side of reality

Columbian, Feb.

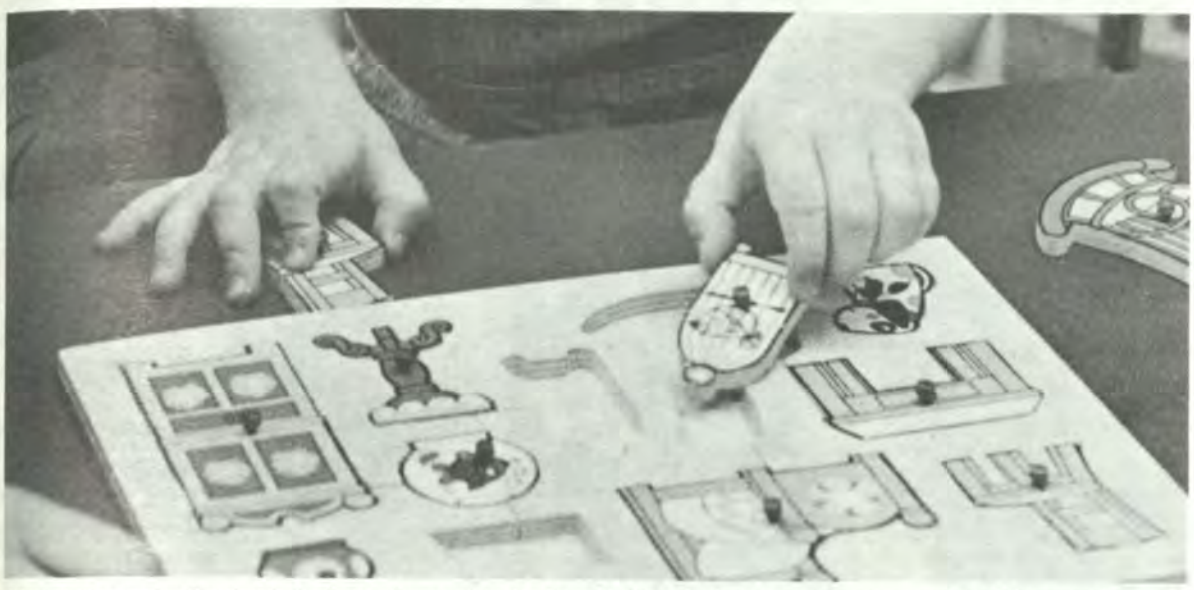
People who don't know her sometimes dismiss 6-year-old Tehani Bergman as a brat who needs a good dose of discipline. A pretty, innocent-looking child with curly brown hair, she makes strangers mad when she walks up to them in a shopping mall and pulls their hair and rips off their glasses.

Beth Bergman, meeting their dirty looks, tries to explain her daughter's problem.

"You tell them she's autistic," she said.

"Artistic," they say, not understanding her. "What's wrong with being artistic?"

It is a common reaction. Not many people know what autism is, let alone how a child with the disorder acts. But Tehani is not alone. Studies say autism occurs in 5 out of 10,000 births, though some say the number is as high as 15 out of 10,000. Four times as many boys as girls have it.



Solving the puzzle of autism is the focus of research by Dr. Gene Stubbs, who investigates causes — and possible prevention and treatment — of the brain disorder that occurs in 5 out of 10,000 births.

Autism is a lifelong brain disorder that typically shows up during the first three years of life.

The cause of autism remains a mystery, but a Portland psychiatrist who has been researching the brain disorder for 15 years says it might be related to a virus passed from mother to fetus.

"My own personal opinion is that it is" related to the virus, said Dr. Gene Stubbs, "but that is not proved yet."

Stubbs, associate professor of psychiatry at Oregon Health Sciences University and the OHSU's Crippled Children's Division, said seven of the more than 150 autistic children he has seen have intrauterine cytomegalo virus.

"Ninety-nine to 100 percent of these mothers don't know they're exposed," he said. "The virus crosses the placenta and may or may not infect the baby, and if it does, it may not affect the baby."

The virus usually is passed from the mothers' children. It probably is passed through contact rather than through the air.

Some children do not have symptoms of autism until 2 or 3 years of age. Their brains probably already had been "seeded" with the virus, but it didn't affect them, Stubbs said.

"Then suddenly something could come along, like a stress, and depress their immune system, or another infection could come along. . . . These are still hypotheses to be proved or disproved," he added.

"It could be many disorders that contribute to the picture."

Part of his research involves looking at antibodies to the virus and antinuclear antibodies in blood samples from mothers of autistic children. Antinuclear antibodies are antibodies against a person's own tissues. He suspects the virus can produce them.

His goal, he said, "is to find the cause or causes (of autism), and then to find prevention or treatment or both."

Crippled Children's Division stories continue on page 14.

School of Nursing

Image problems, low pay contribute to national nursing shortage

Shortage of qualified nurses predicted as profession evolves.

Portland Business Today, Sept.

Hospitals and other health care providers face a variety of problems each day, but a concern that is inching its way to the top of their lists is a shortage of qualified nurses.

The U.S. Department of Health and Human Services predicts there will be a 40 percent undersupply of bachelor's degree-prepared nurses by 1990. By the year 2000, the nation will have only half of the nurses needed, according to industry statistics.

The American Nurses' Association Inc. reported the vacancy rate for registered nurses in hospitals nationwide doubled between 1985 and 1986.

Although the problem has not completely hit Oregon, it is on its way, observers say.

"It would be my belief that probably in the next year we will experience some of the problems other parts of the nation are currently experiencing," said Dr. Carol Lindeman, dean of the School of Nursing at the Oregon Health Sciences University.

Recruitment of nursing school students is being hindered by a poor perception of the nursing profession as well as a wider array of other career opportunities with better salaries, the professionals say.

"The image will only change when reality changes. In the hospital setting in particular, nurses are still treated by other health care workers as a second-class citizen," Lindeman said. "They don't get much respect for the work they do."

Janet Moore, director of professional services with the Oregon Nurses Association, said salaries are a big factor in the nursing shortage. The pay scale — which ranges only $6,000 in most instances for various nursing positions — is too low, she said.

Currently, nursing enrollment is on the rise at OHSU with 184 applications received this year. However, 53 of those applicants were turned away because the program is limited to between 100 and 130 students. At the university's La Grande campus, 31 applications were received for general degrees. The university received 136 applications for its master's degree program, with about 45 of those coming in at its outreach program in Southern Oregon.

Oregonians' views of the nursing profession are more positive than elsewhere in the country, Lindeman said, and that has aided enrollment.

The fact that the school draws a variety of applicants — from grandmothers and people changing careers to high school students — also boosts registration at OHSU.

Lindeman said the nursing crunch nationwide has forced outsiders to look at Oregon schools for staff. For example, the Yale New Haven Hospital has suggested setting up a program where OHSU students can go to their facility for a summer work experience and be paid "nice" salaries.

"For our School of Nursing we give priority to Oregonians to come here to school. We'd like to see those people stay (in state)," Lindeman said.

Cross-cultural awareness goal of OHSU's international doctoral nursing conference

Scribe, July

Although Japan and Thailand are economic and cultural light-years apart, when it comes to nursing they share one thing in common: the need to make modern nursing know-how culturally relevant for their countries. This was the premise of a two-day conference in late June sponsored by the Oregon Health Sciences University School of Nursing, entitled "International Perspectives and Implications for Doctoral Education in Nursing."

OHSU is re-evaluating its baccalaureate, masters and doctorate nursing programs, says associate professor Barbara Gaines, R.N., Ed.D., chairman of the conference planning committee. "Americans are accused of being globally illiterate," she says. "We need to prepare students to function in the world. We still prepare students as if they were going to work in Portland, Oregon. Even if they do, because of the number of culturally different people they're told to work with, they need a greater awareness of what things influence health practices."

Gaines invited speakers from Israel, Thailand, Japan, Scotland, Colombia, Canada, Norway and the U.S., most of whom are associated with major programs offering or preparing to offer doctoral nursing programs. Two of the speakers the first day were Prabha Limprasutr, B.N., Dr.P.H., chairman of the Department of Public Health Nursing at Mahidol University in Bangkok, and Hiroko Minami, R.N. D.N.Sc., professor at St. Luke's College of Nursing in Tokyo. The two women have vastly different concerns, but their solutions primarily focus on tailoring education to the specific needs of their countries.

Especially for advanced post-baccalaureate degrees, U.S.-trained nurses dominate the two countries' nursing sciences education programs. From Japan's research philosophy to postnatal care in rural Thailand, there is often a great disparity in education and application.

For example, Minami says she had difficulty reorienting to Japan after receiving her doctorate at the University of California, San Francisco, because of the "different attitude toward science among Japanese scholars (and) different value systems.

The difference in values means entire concepts have to be rethought.

For example, in a list of cultural interpersonal differences, Minami mentioned the concepts of dependence and independence. A goal of U.S. nursing is to make people "independent," which is valued in America. In Japan, independence is "not so good," she says. "We have autonomy, but independence is something else. We are dependent. We are taught that a human cannot stand by himself."

The nursing school faculty will consider all the presentations and debate program changes this fall, Gaines says.

"We must make it possible for the students to (make the transition into their countries). They need a set of thinking processes to ask the right questions."

Myths and facts about premenstrual syndrome focus of health clinic and lecture

Coos County World, June

Premenstrual syndrome (PMS) is a complex problem that affects millions of women every month.

Diana Taylor, R.N. and director of the Menstrual Disorders Clinic at the Oregon Health Sciences University, will discuss "PMS: Fact or Fad?"

The physical and emotional symptoms of PMS regularly affect about 40 percent of women, mostly age 20 to 35, during the time between ovulation and menstruation, Taylor said. In most cases the symptoms are mild, but 5 to 10 percent of women have symptoms so severe that their daily life and work are disrupted.

The cause of PMS is unknown, Taylor said. Physical symptoms include abdominal bloating, headaches, breast tenderness, weight gain and food cravings. Some of the emotional symptoms are depression, mood swings, irritability and tension.

"Treatment of PMS should be multidimensional and individualized. A pill won't make it go away," she said.

Treatment plans may include stress management, diet supplements, exercise, medication, vitamin supplements and counseling.

The Menstrual Disorders Clinic, established in 1983, focuses on treatment and research, Taylor said. It is the only facility of its kind in Oregon. More than 3,000 women from throughout the Northwest have been evaluated at the clinic.

Research at the clinic is helping to dispel myths and broaden the knowledge about PMS and other women's health problems, she said.

The stories above are condensed.

Nurses in southern Oregon get chance at master's degree at SOSC

Ashland Daily Tidings, Nov.

Southern Oregon will benefit from extensive medical research during the next three years as local registered nurses take advantage of a unique opportunity to earn their master's degrees at Southern Oregon State College.

SOSC was chosen in the fall of 1986 as the first site for the Oregon Health Sciences University School of Nursing's new Rotating Master's Program. Thirty-five nurses from Jackson, Josephine, Klamath and Douglas counties registered in September for this one-time chance to get their graduate degree at SOSC.

"It's a wonderful venture because it enables nurses in our community to get training," said Juliana Cartwright, associate director of the nursing program at SOSC.

Professors from OHSU travel from Portland every other weekend to teach nursing theory and research classes at the college. The part-time program will take three years to complete, and, once finished, will move to another location.

"It's good for our community because the nurses won't have to take the time off to go elsewhere," said Cartwright. "And, it will consequently increase the valley's pool of potential expert nurse leaders."

One area of study available for graduate students is adult health and illness, which explores nursing care for patients who are ill and usually in a hospital or institutional setting. The other area is community health care systems, which prepares graduates to provide nursing care to populations such as a group of employees, students, etc.

In addition to courses, students must prepare a master's project and accumulate clinical experience at various health agencies in southern Oregon. Cartwright said the degree will enable nurses to have more in-depth and varied nursing roles in the community, including teaching or administration.

SOSC graduate Patty Hoyecki, a registered nurse and clinical instructor at SOSC, is one of the students enrolled in the master's program.

Hoyecki said agency administrators in the valley have welcomed the new program with open arms. She is currently doing her clinical work at Rogue Valley Medical Center, and plans to conduct her research on systems of trauma care in the Rogue Valley.

It's an area that's been really neglected, and people are just now becoming aware of it," said Hoyecki, who spent much of her 11½ years in nursing in intensive and critical care units and emergency rooms.

"Our main focus is research: practical research that will really make a difference in nursing," said Hoyecki. "If you have 35 graduates doing research around the agencies in this part of the state, it will benefit the agencies, potentially increase the quality of care and potentially decrease cost.

The School of Nursing last year created the state's first rotating master's degree program for nurses, which will bring OHSU teachers to areas of the state too sparsely populated to support ongoing master's programs.

Resource for hearing-impaired infants, families moves to new location on 'the Hill'

Scribe, Nov.

Since its start-up in 1971 as an independent program, over 150 families with hearing-impaired infants have received long-term habilitation services, and over 500 professionals have received training from Infant Hearing Resource.

Last month, IHR ended its 15-year affiliation with Good Samaritan Hospital and Medical Center and began a new one with the Oregon Health Sciences University.

Nancy Rushmer, M.A., IHR director, began searching and negotiating for a new IHR home in September 1986, following Good Samaritan's decision to "sharpen its focus and re-allocate its resources. Pediatrics was not a major focus," said Rushmer.

Bob Williams, associate hospital director of planning and development for OHSU, is conducting the negotiations with IHR and said that he is "pleased to welcome Infant Hearing Resource to the university, where their affiliation with the Crippled Children's Division and Doernbecher Children's Hospital will be advantageous for all concerned.

"IHR has an excellent performance record," said Williams. "Their work rounds out the university's spectrum of services for children and combines with the educational activities that we do here."

According to Rushmer, the IHR staff is "excited about the prospect of this offer because OHSU has all the services that match our components. There is a real opportunity for professional interaction and program integration," she said.

Silverton Elks give financial support to help thousands of children see

Silverton Appeal-Trib., July

More than $38,000 was given to the Elks Children's Eye Clinic by the Oregon State Elks Association during its recent statewide convention. The eye clinic is part of University Hospital at the Oregon Health Sciences University in Portland.

Of the total, $550 was donated by Silverton Elks Lodge 2210.

Since 1949, the Oregon State Elks Association has contributed to and provided major financial support for the clinic through its "Vision for the Future" program. The Elks Children's Eye Clinic is an internationally known facility that has served as a model for other university-based eye clinics for children. Its missions are patient care, community service, research and education.

During the past 35 years, more than 35,000 children have made in excess of 125,000 visits to the clinic. Some 5,000 operations to correct serious eye problems have been performed by university surgeons.

For many children, these services otherwise would not have been available. All the patients have benefitted from the more than $3 million contributed by the Elks.

Oregon children receive expert eye care at the OHSU eye clinic, thanks in part to major contributions from the Oregon State Elks Association.

Elks provide $12,000 fund

Statesman Journal, Dec.

The Oregon State Elks Association recently contributed nearly $12,000 to the Elks Children's Eye Clinic Equipment Fund at the Oregon Health Sciences University.

The clinic has been in operation since 1949 and has provided treatment for more than 35,000 children. The Elks have given more than $3 million to its operation. Some $359 of the most recent gift came from Salem Lodge 336.

CCD Continued

Work at university opens doors to independence, dignity, challenge for disabled man

Oregonian, May

Six months ago, Larry Betts did something many people think a mentally retarded person cannot do: He got a job.

That job has given the 23-year-old Portlander three things also not commonly associated with the mentally disabled: dignity, a measure of independence and a paycheck.

Betts works as a transportation aide at Oregon Health Sciences University, transporting chemical samples from one laboratory to another.

He is part of a 9-month-old university program of the OHSU's Crippled Children's Division, designed to find employment opportunities for developmentally disabled persons.

Called the Hospital Jobs Project, the program has linked three people with jobs so far, and plans are formed to find work for at least three more, said Randy Shelton, coordinator of the program.

The program is partly funded on a monthly basis by Multnomah County, which refers potential workers to Shelton. She then tries to find a job for the clients on the OHSU campus and perform the work herself for two or three weeks so she will know how to train the new worker.

Since he started work, Betts, who earns slightly more than minimum wage, has moved from a group home to his own apartment in a supervised setting, said Shelton. Betts has done so well at his job that he has proved his ability to handle more responsibility in his personal life, she said.

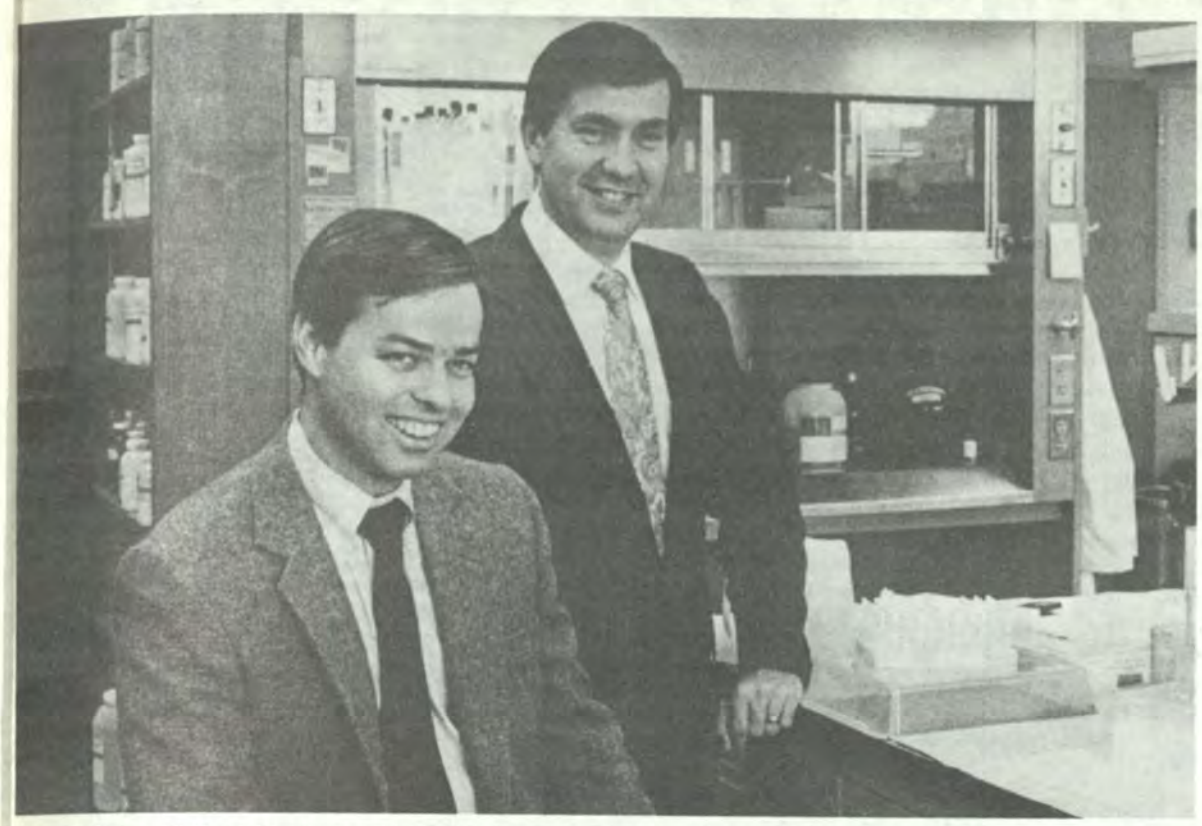
Despite the success of clients like Betts, myths about mentally retarded people persist, said Phil Bourbeau, who supervises Shelton and runs a separate vocational program for disabled people. One popular misconception, Bourbeau said, is that "they can't work with the same quality and same output as a 'normal' person."

"But actually, they just learn things a different way — the way an illiterate person gets information a different way" from those who read, Bourbeau said.

(See page 13 for other CCD stories.)

The stories above are condensed.

Major pharmaceutical firm commits $2.5 million for OHSU research



Darwin Cheney, of Ciba-Geigy Pharmaceuticals Division, gives vote of confidence in Vollum Institute to Dr. Eckard Weber (foreground), senior scientist and the institute's interim director.

Portland Business Today, Oct.

The Oregon Health Sciences University's Vollum Institute for Advanced Biomedical Research has received a $2.5 million vote of confidence from a major chemical and pharmaceutical company.

Ciba-Geigy Pharmaceuticals Division of Summit, N.J., will give the university a "core grant" of $500,000 a year for five years to promote the exchange of information and research between scientists at OHSU and Ciba-Geigy.

"This is to me a very impressive statement of approval . . . of the quality of work being done in the institute," said Dr. Leonard Laster, OHSU president, prior to a news conference announcing the agreement.

The grant is unique in that it is not for a specific type of research, but for general support of research at the institute.

The Vollum Institute is dedicated to the use of molecular biology in brain research. The pharmaceutical company is interested in working with IABR scientists in the areas of nucleic acid, peptide and protein chemistry and molecular biology. The agreement calls for scientists to come to OHSU to be trained in advanced biomedical research techniques. In addition, scientists from the institute will visit Ciba-Geigy scientists at research facilities worldwide.

"The training our researchers will receive in utilizing complex molecular biology techniques will help to keep Ciba-Geigy on the cutting edge of pharmaceutical research and development," Dr. Thomas Glenn, senior vice president and director of research at Ciba-Geigy, said.

Not only will the Ciba-Geigy grant help the Vollum Institute develop further, it will also bring money into the local economy which will provide more jobs, and it eventually could result in additional investments through the establishment of a research division. If one company of this stature provides funding, it gets the attention of similar firms, Laster noted. "This is the kind of economic development that could create an economic comeback," he said.

OHSU's Marquam Hill lecture series brings science to the public

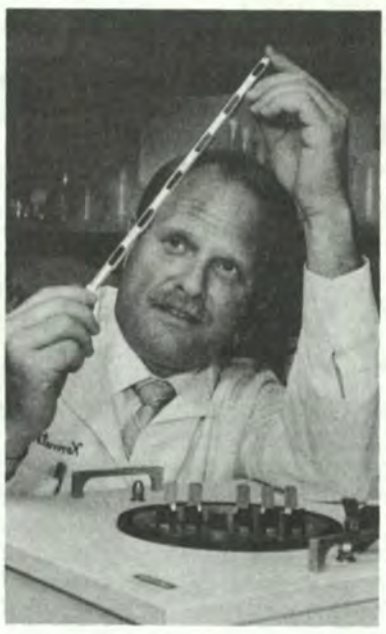
Oregonian, Sept.

Oregon Health Sciences University will present the 1987-88 Marquam Hill Lectures series beginning at 8 p.m. Sept. 30 in the OHSU Auditorium.

The lectures, free and open to the public, discuss current information on health-related issues.

The series opens with "Troubled Teens: Detection and Treatment'" presented by William Sack, M.D., head of the OHSU Division of Child Psychiatry, and Gregory Clarke, Ph.D., OHSU assistant professor of psychiatry. "Human Reproduction: Ethics of New Technologies" will be presented Thursday, Nov. 5, by Kenneth Burry, M.D., associate professor of obstetrics and gynecology and co-director of the OHSU Infertility Service; "Home Care of the Elderly: Burdens and Benefits" will be presented Dec. 3 by Patricia Archbold, D.N.Sc., OHSU professor of family nursing; "Off-Beat Heart Rhythms: New Ways to Help" will be presented Feb. 4 by John McAnulty, M.D., professor of medicine and director of the OHSU Cardiac Catheterization Laboratory; "Clicking Jaws: Silencing the Stress of TMJ Disorders" will be presented March 3 by Ralph Merrill, D.D.S., M.Sc.D., chairman of the Department of Oral and Maxillofacial Surgery in the OHSU School of Dentistry; and "Cancer in Children; a Brighter Outlook" will be presented April 7 by Robert Neerhout, M.D., professor and chairman of the OHSU Department of Pediatrics, the chief of pediatrics at the University's Doernbecher Children's Hospital and the current president of the American Cancer Society, Oregon Division.

Dr. Pat Archbold



Dr. Kenneth Burry

Dr. Robert Neerbout

Statewide Alzheimer's center launched to coordinate research, care, education, support

Oregonian, Oct.

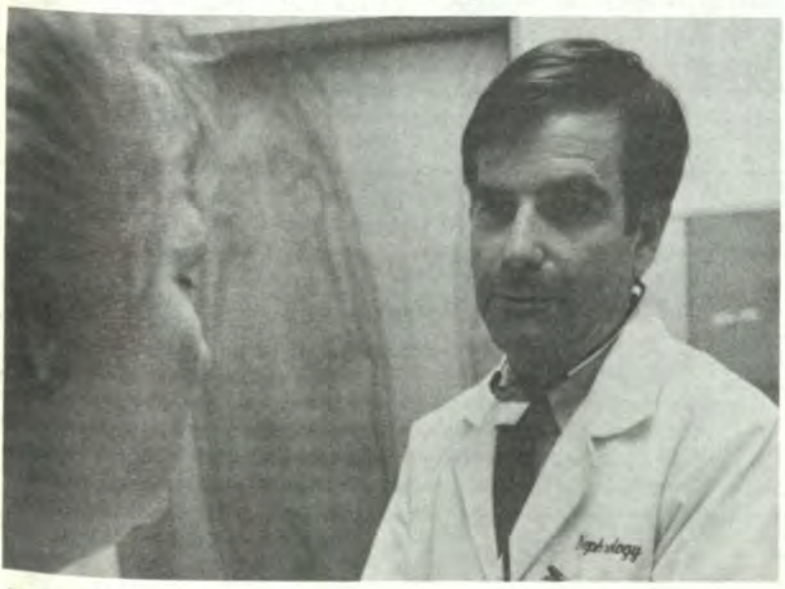
Alzheimer's disease research will be the focus of a new statewide center approved Friday by the state Board of Higher Education.

The Alzheimer's Disease Center of Oregon will be a joint venture of Oregon Health Sciences University, Good Samaritan Hospital and Medical Center and the Veterans Administration Medical Center. The center will coordinate current research, patient care, educational and family support programs. It will not be housed in a central location; each institution will coordinate research and services.

Although the center will be based in Portland, it will serve Oregon's 51,000 Alzheimer's patients statewide, said those testifying before a subcommittee of the board. Plans include establishing a computer network to collect patient information and a "brain bank" to collect tissue samples for research.

During the spring, the Legislature appropriated $100,000 to the Executive Department to conduct research on the brain disease. According to a report submitted to the board, $25,000 is needed to establish the brain bank and $75,800 for the computer network. Other funding will be sought from federal and private sources.

National Dairy Board grants $4 million for pioneering calcium study at OHSU



Dr. David McCarron

Scribe, Sept.

David A. McCarron, M.D., has scored another coup in securing dairy funding for his internationally-recognized research on calcium's effect on hypertension and heart disease. The Sept. 2 pledge of $4 million for Oregon Health Sciences University represents the largest single contribution ever made by the dairy board to a single institution.

The National Dairy Promotion and Research Board's funding will be distributed over a three-year period. McCarron, co-head of OHSU's Division of Nephrology and Hypertension and a professor of surgery, said, "The dairy board's funding will allow the university's hypertension program to continue investigating the factors that influence blood pressure."

Joseph E. Westwater, chief executive officer of the dairy board, said as a result of the research, more information about the role of calcium and dairy products in the diet will be obtained. "This is a situation where everybody wins," Westwater said. "The public stands to benefit most because the research is structured to yield results that can be used to improve health."

McCarron said the selection of OHSU "further acknowledges the important role this university maintains in the biomedical community." The announcement was made in the courtyard of the new Vollum Institute for Advanced Biomedical Research, which was christened this year.

McCarron and his colleagues' pioneering work in calcium's effect on hypertension created tremendous interest in the scientific community. His research has been presented at scientific meetings, published widely in medical journals and has been verified by researchers in the U.S. and other countries.

The work, which also will be supported by the National Institutes of Health and the U.S. Department of Agriculture, will continue to investigate the thesis that individuals and animals with hypertension often demonstrate.

An OHSU official said the agreement with the dairy board is "a unique funding arrangement" that represents an "ideal partnership between public and private sectors."

The stories above are condensed.

1987 in review: growth at OHSU means more jobs, stronger economy

University boosts state economy

By returning $10 to the state for each dollar it receives from the general fund, the OHSU has proven itself a vital partner in Oregon's economy.

- During the last budget period, OHSU received $55 million from the state. To meet its annual budget of $210 million, the OHSU attracted an additional $155 million from non-state sources. This three-for-one return coupled with the multiplier effect means that the OHSU's 5,700 employees and 1,700 students and residents returned about $500 million to the state economy.
- Recognizing that institutional excellence also requires partnerships with the private sector, a growing number of individuals and corporations have sought to share in OHSU's future. Since 1982, this philanthropy has increased dramatically from $8 million to $52.5 million in June 1987.
- Dollars, though important, are only one measure of OHSU's vitality. Another measure is construction on "the Hill." Despite the regional downturn in construction, the OHSU has just completed more than $200 million in construction projects. Currently, more than $160 million in additional construction and remodeling is under way on campus.
- OHSU's faculty and staff have long recognized the obligation they have to undertake medical research. Central to the fulfillment of this obligation is the need to attract much-coveted research dollars at the national and international levels. The OHSU has been increasingly successful in this endeavor. Last year, for example, such funds from outside Oregon increased by 63 percent, from $18 million to $28.5 million including recent multi-year grants from such corporations as Ciba-Geigy and Cambridge NeuroScience Research to fund research into novel pharmaceuticals to treat neurological disorders.

Dave Witter, now interim president, details plans for new, 420-space parking structure at its August groundbreaking.

Buildings to be revitalized, expanded

Visitors to campus during the next few years may be hard-pressed to recognize the university's vintage buildings after an extensive capital construction plan is completed.

- University Hospital and Clinics launched the most ambitious plan in OHSU history to renovate, improve and consolidate patient services and facilities. Several projects constitute a $37.5 million investment in federal, private and hospital operational funds. (No state general funds are being used.) A new heliport and magnetic resonance imaging system have been completed. Construction of a new patient/visitor parking structure, as well as a $10 million renovation and updating of the south hospital, are under way.
- Northwest children will benefit from the major construction and renovation projects under way at Doernbecher Children's Hospital. Its Pediatric Intensive Care Unit received a $1.25 million renovation, funded through private donations, 60 percent of which resulted from efforts of the Doernbecher Foundation. Plans call for the entire children's hospital, now spread out on four floors of University Hospital, to undergo remodeling and upgrading, and for similar services and laboratories to be relocated near each other. Early design work has begun on a new Neonatal Intensive Care Unit that will consolidate the hospital's care for newborns.
- The OHSU Basic Science Building received a $10 million appropriation from the federal government for planned expansion critical to research and teaching programs. Federal funds for the building, secured through efforts of Senator Mark Hatfield, brings the amount available for expansion to $17.1 million. The state has approved $7.1 million for the first phase of the project.

Construction on a seven-story addition to the Basic Science Building, slated to begin Jan. 1, 1989, will result in more classroom, study and lab space. Addition (left) will be built on the hillside south of the science building (right).

- Plans to build the nation's seventh regional eye center at the OHSU, funded through major support from Research to Prevent Blindness, were unveiled in September. The center will capitalize on the research, teaching and patient care now conducted at OHSU to provide a resource for physicians and their patients throughout the Northwest. Eye research currently conducted at the OHSU includes new therapeutic techniques and technology for treatment of ocular cancer, prevention of blindness in premature babies, arresting of visual deterioration in diabetics and development of new methods to treat glaucoma, corneal disease, hereditary eye problems and retinal disease. Groundbreaking is expected in fall. The new center will encompass six floors and will include consolidated clinical and basic science research laboratories, the Elks Ophthalmology Center, and specialty clinics and laboratories.

International oxidases meeting attracts pioneer researchers

The Fourth International Symposium on Oxidases and Related Redox Systems was held in early October.

The symposium, which brought together an international group of authorities on many aspects of the new oxygen biochemistry and molecular biology, was organized by Dr. Howard Mason, professor emeritus of Biochemistry. Dr. Mason, a pioneer researcher who has studied the biologic combustion of oxygen to support life and developed the field of oxygenation in the 1950s, was the winner of the first Medical Research Foundation Discovery Award.

The ways in which oxygen supports life have been studied for centuries, and in recent times great progress has been made in understanding the ways in which oxygen sustains living organisms. The results bear upon understanding stroke, myocardial infarction and many other disorders in which the essential supply of oxygen to living tissues is limited or cut off.

Symposium topics included atmospheric oxygen and the ozone layer, oxygen toxicity, oxygen-dependent metabolism of drugs and environmental toxicants, and oxygen dependent biosynthesis of fats, proteins, carbohydrates and crucial hormones. In addition, the 100th anniversary of the birth of David Keilin, the discoverer of the universal respiratory mechanism in living cells, was celebrated by talks from his former students and associates.

Dr. Howard Mason

OHSU supporters enhance campus

The Marquam Hill Steering Committee has been increasing public awareness of the university, developing support and enhancing the quality of life on campus since 1981. During the past year the committee introduced thousands of Oregonians to the campus through tours and lecture programs, while making it a more attractive place to work and visit.

- About 200 original prints, sculptures, paintings and other pieces of fine art were donated to the campus through efforts of the group's Art Committee.
- Campus tours have given more than 7,300 people from around the state a first-hand look at the university's patient care, education and research programs. The Marquam Hill Steering Committee created the program in 1982 and continues to offer interested adults and students general or interest-based tours of campus.
- The Marquam Hill Lecture Series brought the most up-to-date research to nearly 2,000 Oregonians last year. The current series, which began in September, features six of the university's most outstanding faculty members. Speakers have discussed their research in teenage depression, ethics of new reproductive technology, home health care for the elderly and diagnosis and treatment of cardiac arrhythmia. Lectures scheduled in March in April will address treatments for temporomandibular joint (TMJ) disorders and childhood cancer.

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