Dedication Special

## A New Era:

### The Natural Sciences At Pacific Lutheran University

## Building On Proven Excellence

The Natural Sciences at Pacific Lutheran University have a long history of excellence, going back to the days when a young man named Anders Ramstad introduced college level science courses in 1925.

But it was not until 1949 that a separate science facility was built. And that building, fittingly named in honor of Ramstad, has continued to provide most of the science facilities at PLU to the present day.

During the intervening 35 years, in spite of increasingly rapid advancements and sophistication in the sciences and a tripled campus enrollment, very little new or more modern space was available on campus. There was an addition to Ramstad Hall in 1959, but since then additions have been makeshift, overflowing into six different campus buildings.

Recognizing the critical need for new facilities, the PLU Board of Regents launched a \$16.5 million capital campaign in 1979 called Sharing in Strength. A new 88,000square foot science facility was the primary objective.

The university reached out to its constitutents: the church, alumni, business, corporations and foundations, the internal campus community, and other friends of the university. The response was gratifying and heartening, even during an economic era of first rampant inflation, then recession. All of the groups responded generously. The number of gifts and number of dollars was greater than had ever before been received.

After only 18 months, progress was such that a site and architects for the science facility could be selected. In September 1982, the Regents authorized architects specifications, and in May 1983 ground was broken just north of Olson Auditorium. Today the building is virtually complete, with dedication in January 1985. The first classes in the new facility will begin in February. It was on the occasion of the groundbreaking that the Regents announced the name of the new building: the William O. Rieke Science Center. Dr. Rieke, the university's 11th and current president, personifies PLU and the type of graduates it seeks to produce. A PLU science graduate himself, class of 1953, he spent the first 22 years of his career in the health sciences. Since his inauguration at PLU in 1975, he has worked tirelessly to build a university with a quality faculty and academic program, supported by the finest facilities possible, all within the context of PLU's



Dr. and Mrs. William O. Rieke

Christian heritage and emphasis.

The new Rieke Science Center will allow the Natural Sciences to flourish in many new ways, perhaps few of which can presently be forseen. The Center will enhance science instruction by allowing greater faculty and student interaction within and among the disciplines. There is space for computer science and engineering, both programs in great demand, to grow. More space, more modern equipment, more time and more interaction will insure the vitality of the Natural Sciences at PLU into the 21st century.

The faith, the commitment, and the investment of thousands of groups and individuals in this great project will soon begin to bear tangible fruits. The community, and society at large, will be enriched.

## New Science Building Name Honors PLU's 11th And Current President

A resolution by the PLU Board of Regents made public May 22, 1983, announced that the newest campus academic building would be known as the William O. Rieke Science Center, honoring PLU's 11th and current president.

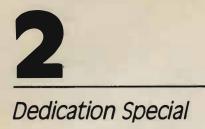
There were several reasons why the Regents choice was uniquely appropriate. Dr. Rieke and his wife, Joanne, are the inspirational and guiding forces behind notonly the capital campaign that made the new building possible, but all areas of the university's educational endeavor — academic, social, physical and spiritual.

PLU's president is an exemplary

product of Pacific Lutheran's Natural Sciences program. He graduated *summa cum laude* with a degree in biology in 1953. For the next 22 years he served in the health sciences field as a student, teacher, researcher and administrator. For many years he was among the nation's elite in the area of transplant biology and did some of the original research which made organ transplantation possible. He received PLU's Distinguished Alumnus Award in 1970.

Dec 1984

The naming also perpetuated a long-standing campus tradition: seven existing campus buildings bear the names of former presidents.



## State-Of-The-Art Facilities, Equipment



Foundation pouring — October 1983

Health sciences, computer sciences and engineering continue to be among the most promising careers of the future.

The PLU Division of Natural Sciences is presently offering highly successful programs leading to careers in these and many other areas. These programs have thrived for years on the strength of the dedication of the Natural Sciences faculty, in spite of severely inadequate facilities.

For example, the percentage of successful applications from PLU students to medical and dental schools is more than twice the national average. PLU began offering a *Computer Science* major only recently, but graduates have already been praised by top U.S. firms from Boston to Phoenix, in part because they have received a sound liberal arts background. The strength and growth of the program is also illustrated by the addition of two computer science master's degree programs this fall.

The *Biology* department features thorough preparation for a professional career through an American Chemical Society-approved program. Student-faculty research is encouraged (see page 5).

PLU's location between the Olympic Mountains and the Cascade Range offers an ideal environment for *Earth Sciences* students to examine geologic and marine environments. The demand for qualified graduates in energy and mineral development has never been higher.

PLU's 3-2 program in Engineer-

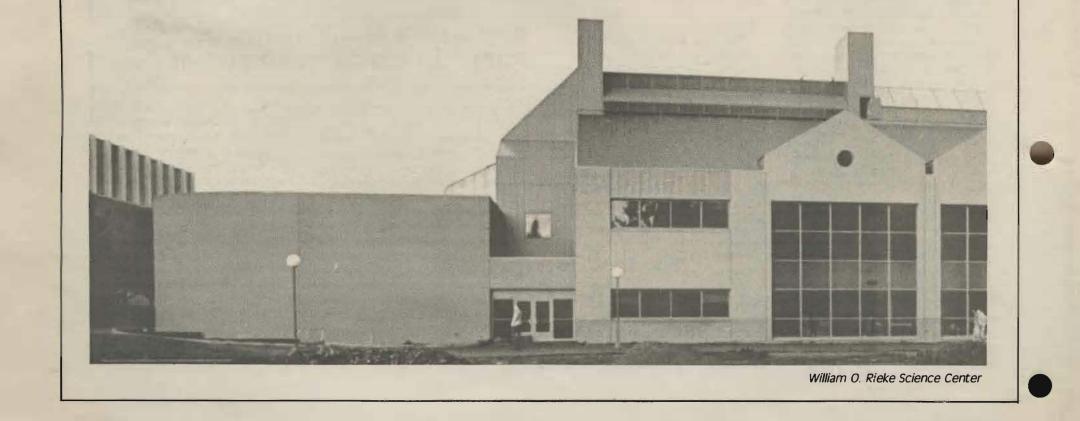
## Dedication

Friday, Jan. 11 - 12 noon Media Luncheon/Tour (invitation only) Thursday, Jan. 17 - 12 noon

Major donors Luncheon/ Tour (invitation only) Thursday, Jan. 17 - 4 p.m. High-Tech Professionals reception



Winter 1984 — Looking northeast from Olson Auditorium: the foundation for the office wing is at lower left, Leraas Lecture Hall is at lower right.





## **Will Complement Exemplary Teaching**

*ing* gives students the best of two settings — breadth at PLU and depth in an engineering specialty at another university. PLU has formal agreements with Columbia and Stanford, but students may transfer to any accredited fouryear engineering program and receive the same two degrees.

A four-year Engineering-Physics degree offers a versatility to students. It is more applied than a physics degree and more theoretical than the usual engineering degree. A four-year Electrical Engineering major is under consideration.

The PLU *Mathematics* major prepares students for a variety of careers. Many students have earned national recognition among their peers as a result of the annual international Putnam mathematics competition. PLU enters a team each year.

The division's *Physics* major, like others in the Natural Sciences, emphasizes a low-student teacher ratio and the opportunity to en-

### Schedule

Friday, Jan. 18 - 12:30 p.m. High School/Community College Open House

Saturday, Jan. 19 - 3 p.m. Professional Alumni Tour-/Dinner (invitation only)

Sunday, Jan. 27 - 2 p.m. Ribbon-Cutting, Dedication (open to public) gage in independent research projects (see page 8).

A new era in which state-of-theart facilities and equipment complement and enhance exemplary teaching dawns with the opening of the William O. Rieke Science Center in February 1985.

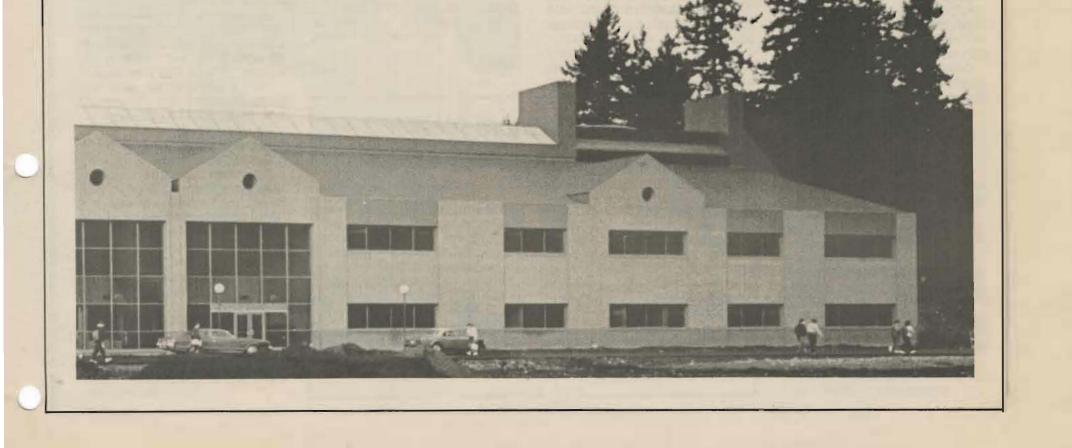
The Center will enhance science instruction by allowing centralization and far greater interaction within the science disciplines. It provides new space essential to the enlargement of the computer science program in engineering and engineering-computer science. Both are in great demand and in short supply regionally and nationally.



Office wing interior



Leraas Lecture Hall





# The most enduring product

A university's final, most enduring product is its alumni. The recognized achievements of those alumni are one measure of an institution's impact on society.

Any attempt to list the most prominent of graduates must be undertaken with the awareness and disclaimer that for each one noted, there are many equally deserving

Following are the names of several graduates from Pacific Lutheran University's Division of Natural Sciences who have earned particular distinction. Among them are 11 of PLU's 30 Distinguished Alumni, the highest honor bestowed by the PLU Alumni Association.

It is noteworthy that all but three graduated during the decade between the early '50s and early '60s, when Pacific Lutheran was growing rapidly in both size and quality of its academic programs. Ten years from now the number might well be increased by several fold as graduates now in their 20s and 30s make their marks on society.

Heading the list by virtue of his position as president of PLU and the fact that the new science complex is named in his honor is Dr. William O. Rieke. Prior to his tenure at PLU, he spent 22 years in the health sciences, and was ranked as one of the world's elite in research in transplantation biology and mechanism by which the body accepts or rejects tissue and organ grafts.

Rieke is one of eight on the list who earned distinction in medical or medicine-related fields, not surprising since PLU's pre-med and pre-dentistry programs have maintained a high reputation since before World War II.

Dr. M. Roy Schwarz, featured speaker at the science center dedication Jan. 27, is a vice-president of the American Medical Association, specializing in education and scientific research. Dr. William Foege earned worldwide recognition for spearheading a decade-long campaign to eradicate smallpox from the world. More recently director of the Center for Disease Control in Atlanta, Ga., Foege is now involved with the World Health Organization's Save Our Children program. There are three prominent medical school professors, including Dr. Lloyd Nyhus at the University of Illinois, another heart transplantation specialist, and Drs. Anita Hendrickson and Eugene Strandness at the University of Washington. Both have earned international distinction, Hendrickson in neuroanatomy and glaucoma research, Strandness in vascular diagnosis and therapy. (Continued on page 5)

PLU Alum Guides AMA **Projects Focusing On Future Of Health Care** 

### **By Judy Davis**

M. Roy Schwarz, M.D., '59, foresees the academic medical community becoming more involved in the American Medical Association (AMA)

"After World War II, the AMA became pre-occupied with socioeconomic matters; now, those interests are being balanced by an emphasis on science and ethics," said Dr. Schwarz, vice president for medical education and scientific policy for the AMA.

"We need to keep in mind it was the academic community, after all, which established the AMA in 1846."

In his current post, Dr. Schwarz is responsible for all educational and scientific concerns of the AMA, including:

The AMA's role in undergraduate medical education: accreditation of all medical schools, residency programs and allied health programs (except physical therapy) in the United States.

Physician accreditation.

- Drug evaluations conducted by 20 AMA scientists.

 Determining the effectiveness of technological advances and procedures.

- Policy positions of the AMA oncerning basic bio-medical research.

 Providing leadership for an international tribunal which names drugs such as interferon.

Dr. Schwarz' areas of responsibility also include nutrition, aging, occupational health and preventive medicine.

In his capacity, Dr. Schwarz does extensive traveling out of AMA offices in Chicago.

"Last week, for example, I gave speeches at Tufts Medical School and Eisenhower Medical Center and debated former Health, Education and Welfare Secretary Joseph Califano," revealed Dr. Schwarz in mid-November.

Overall, the AMA is focusing on ways to reduce the cost of health care, according to Dr. Schwarz.

"We've found 80 to 85 percent of physicians in the United States have frozen their fees for one year, in compliance with a request from the AMA," he indicated.

Dr. Schwarz said the AMA has embarked on a four-year Health Policy Agenda Project which is expected to evolve into a "blueprint" for providing health care in the United States.

"When completed, the project will outline guidelines for determining the manpower, educational programs and research needed in the health-care system in the future," explained Dr. Schwarz.

He added, "We will also be

Dr. M. Roy Schwarz

government should play in this system."

Prior to joining the AMA administrative staff, Dr. Schwarz was vice-chancellor for academic affairs at the University of Colorado School of Medicine. He also served as dean of the U of C Medical School.

Dr. Schwarz has been an associate dean for academic affairs at the University of Washington. While at the U of W, he earned international recognition for establishing the Washington, Alaska, Montana and Idaho (WAMI) program for medical education. Under the program, campus classes, courses at four other universities, training programs in private practices and local hospitals and even satellite-beamed teaching sessions are used to train medical students from states without medical schools.

Dr. Schwarz revealed he was

looking at the role the federal

Schwarz Is Keynote Speaker At Dedication Of Science Center

the role universities such as PLU can play in meeting the challenge facing health care when he presents the keynote speech during the Jan. 27 dedication of the Rieke Science Center.

also will discuss the revolution occuring in genetics and biotechnology.

"I also will describe the kinds of graduate of PLU.

Dr. M. Roy Schwarz will discuss people needed to meet these challenges," said Dr. Schwarz, vice president for medical education and scientific policy for the American Medical Association (AMA).

Dr. Schwarz is a former member of the PLU Board of Regents, During his speech, Dr. Schwarz former PLU Alumni Association president and Alumnus of the Year

He is a magna cum laude

recruited" to become part of the academic medical community by his close friend and colleague, Dr. William O. Rieke, PLU president.

"Dr. Rieke and his wife are godparents to my 17-year-old

son, Ryan," said Dr. Schwarz. He and his wife, the former. Thelma Nygaard, '56, also have a daughter, Tanna, 14.

Although athletics were a priority when Dr. Schwarz entered PLU, he was influenced by several professors to enter the medical field.

"I'm especially grateful to Mark Salzman. an assistant coach and my advisor; Robert Olsen, William Strunk and Magnus Notvedt for the encouragement they provided me.

"Often, without using lecture notes, they opened up an academic world I never knew existed . . . until then, I didn't realize there was so much to be known

. . .

the Lutheran University Scene

Alumni Achievements, Service Are True Measures Of University Merit

### (Continued from page 4)

Dr. Philip Wigen, a 1984 Distinguished Alumnus and professor of physics at Ohio State University, has spearheaded cooperative programs with scientists from many countries, including the Soviet Union.

This year's other Distinguished Alumnus, Dr. Ronald Heyer, is one of two internationally prominent herpetologists and museum administrators. He is a curator at the Smithsonian Institution, Dr. David Wake is director of the Museum of Vertebrate Zoology at the University of California-Berkeley.

Dr. James Freisheim is a professor of biochemistry at the University of Cincinnati School of Medicine.

Dr. Christy Ulleland, a Seattle pediatrician, is widely known for research on alcoholism in pregnant mothers. Another Seattle physician, Dr. Donald Keith, has headed the Washington State Medical Association.

Dr. Peter Wang, until recently a professor of mathematics and national security affairs at the Naval Post Graduate School in Monterey, Calif., is also a threat forecasting expert. Another national security technology expert is Dr. Fred Wikner, formerly with the U.S. Department of Defense.

Two PLU professors with international reputations are Dr. Jens Knudsen in biology and Dr. Fred Tobiason in chemistry. Dr. Knudsen has studied ecosystem recovery following the nuclear test at Eniwetok; Dr. Tobiason has lectured across the nation and abroad on his studies of polymer structures and properties.

H. Eugene LeMay Jr., professor of chemistry at the University of Nevada-Reno, is internationally known as the co-author of the world's leading general chemistry text, Chemistry: The Central Science.

Out of school for only six years, engineering grad Michael J. Chase has formed a software consulting company and is co-authoring a textbook after working at Bell Labs and teaching at the University of Colorado.

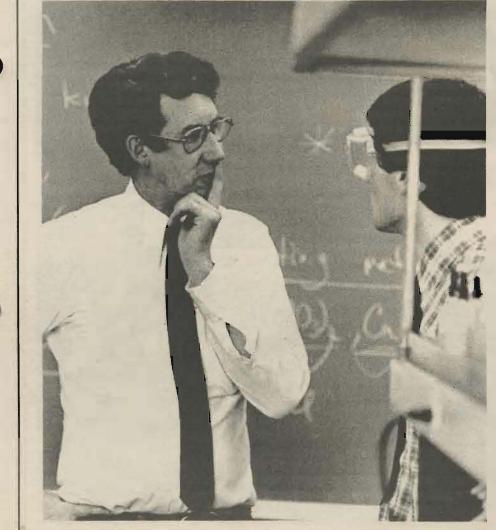
## **Tobiason Involves Students In Research** That Earns International Attention

Watching soft-spoken Dr. Fred Tobiason teach or counsel with students, one might be surprised to learn that he is an internationally-recognized research chemist.

Like his faculty colleagues at Pacific Lutheran University, the 48year-old professor's first love is teaching, and the recognition he has earned from colleagues around the world is a bonus.

During the fall of 1983, Tobiason was invited to present a series of nine lectures in Japan and Taiwan at companies, universities and scientific meetings. His topic, structural properties of phenol formaldehyde resins, wouldn't mean much to non-chemists, but his research and expertise can be of major import to chemists developing all kinds of products.

"It is difficult for a research scientist to say how his work is being applied," Tobiason said. "For example, polymers based on phenol formaldehyde have wide usage, depending upon how they are prepared. It could be adhesives that hold wood products, like plywood, together, or molded plastic or metal materials like dis-



tributor caps, transmission parts, and so on.

'We usually don't know how our information is being used," he continued. "We publish, and other scientists read about our work. We know that because of the hundreds of responses we receive. Our work may give them an idea on how to formulate something, or help change the way they are thinking about the properties they are working on."

Tobiason's concern for students is apparent in both his research and publications. PLU students are virtually always involved in his research projects, and consequently become co-authors of his articles.

In addition to his Far East lecture tour last year, Tobiason has worked with scientists in Germany and Finland. He is participating in a joint research project with a renowned chemist at Johannes Gutenberg University in Mainz, Germany, and spent time several years ago at the University of **Helsin** 

## **Olsen Endowment Fund Supports** Undergraduate **Research Program**

The Robert C. Olsen Endowment Fund, created at Pacific Lutheran University in 1977 in honor of a retired chemistry professor, supports an Undergraduate Research Program that has been an attractive feature of the PLU chemistry program for many years.

During the past five years, the Olsen Fund has provided summer stipends for 13 students, who have assisted PLU chemistry faculty members on a variety of projects or have conducted their own research.

During that period, five students have read papers at regional scientific meetings, and three have seen their publications in scientific journals.

One student, 1984 graduate Terri Harmon, received the award for best presentation at the American Chemical Society Undergraduate Research Symposium in

Fred Tobiason

Another research project took him to Louisiana State University, and he recently spoke at a meeting of the American Chemical Society in Washington, D.C.

This past summer and currently, Tobiason and his students are working on cyclic phenol formaldehyde polymer samples brought back from Kanazawa University in Japan. These samples have special properties; they form cages that can trap other small molecules or ions, and are of special interest as potential catalyst models.

A 1958 PLU graduate, Tobiason has taught at the university since 1966. His numerous honors have included Outstanding Educator in America (1971), PLU Regency Professor (1975) and Danforth Fellow (1978). In addition, he is visible throughout the community as an advocate of environmental concerns.

Portland last year.

In addition, six members of the chemistry faculty have had research published during that time. Many of the papers have had students as co-authors.

Work done by some students was included in lectures presented by chemistry professor Dr. Fred Tobiason in Japan last fall.

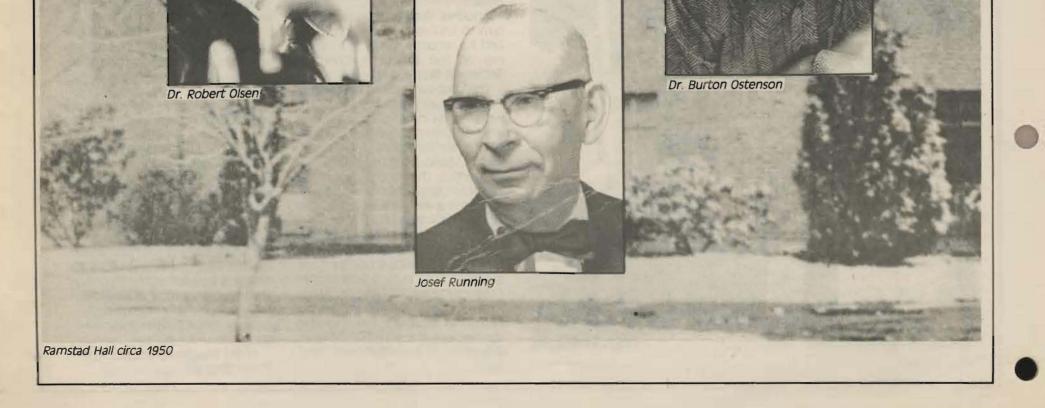
Of the former summer research program students who have graduated, all have gone on to medical or graduate school.

The Summer Research Program began in the early '70s with funding from several sources, including the National Science Foundation and Research Corporation. As those funds have become increasingly scarce, PLU's own Olsen Fund has permitted the program to continue.

Olsen taught chemistry at PLU from 1947-76.









Dedicated Faculty Nucleus Guides PLU Natural Science Into Modern Era

## The pioneers

Areas In The William O. Rieke Science Center have been named in honor of these former faculty members:

#### **Anders Ramstad**

The late Anders Ramstad was the founder of the Pacific Lutheran chemistry department. Appointed to the faculty in 1925, he taught the first college level chemistry courses after the academy had become a junior college.

During his 36-year career on the Parkland campus, he also taught all of the science and math courses except biology at one time or another.

In addition to being the lone member of the chemistry faculty for 21 years, Ramstad served as dean of men and was the school's first football coach. His women's basketball team was a regional power.

Shortly after his retirement in 1961, PLU's science building was named Ramstad Hall in his honor. A chemistry student research laboratory in the new Rieke Science Center will also bear his name.

A 1914 graduate of St. Olaf College, he attended Luther Seminary and University of Washington. He received an honorary doctor's degree from Luther College in Decorah, Ia.

Ramstad died in 1981 at the age of 89. In 1983 the Ramstad family established the endowed Anders and Emma Ramstad Scholarship Fund, which provides stipends annually for outstanding chemistry majors.

Harold Leraas

He retired from teaching in 1974 after 39 years on the PLU faculty. Shortly before his retirement he was presented with an Outstanding Teacher award by the campus chapter of Blue Key, a national male student service honorary.

Scores of his former students, now doctors and dentists across the nation, have contributed nearly a half million dollars to establish the Leraas Lecture Hall in the New Rieke Science Center in his honor.

\* \* \*

#### **Olaf Jordahl**

Olaf Jordahl, another graduate of Luther College, became Pacific Lutheran's first 'official''professor of physics in 1940. He came to Parkland from Northwestern University, and initially set up shop in the basement of Xavier Hall.

He took a leave of absence for a year in 1944-45 to work on the Atomic Energy Commission's Manhattan Project at the University of California-Berkeley. Esteemed in his profession throughout his career, he served on a National Science Foundation advisory panel in Washington, D.C. in 1963.

A colleague recalled, "Dr. Jordahl was a well-organized, thorough and precise person. His lab experiments and demonstrations were a joy and a challenge."

Jordahl earned his master's degree at the University of Pittsburgh and his Ph.D. at the Universityof Wisconsin. At Wisconsin, he also worked under provisions of a post-doctoral research fellowship. second member of the chemistry department faculty after serving for 10 years as head of an electroplating laboratory at General Motors.

"The idea of service" and "the joy of teaching" were Dr. Olsen's motivations during his 31-year teaching career.

In 1975 alumni and friends gathered to honor him on Robert C. Olsen Day at PLU. Former students who are now leading professionals in medicine, industry and teaching presented scientific papers, later published by the PLU Press.

Grateful alumni also established an endowed Olsen Fund at PLU which provides summer undergraduate research fellowships for chemistry students. In addition, a Rieke Science Center chemistry instruction laboratory will bear his name.

Olson earned his bachelor's and doctor's degrees at Michigan State University.

\* \* \*

#### **Burton Ostenson**

Burton Ostenson and Harold Leraas had been friends since boyhood. Both grew up in Minnesota and attended Luther Colelge in Decorah, Ia. They both went on to graduate school at the University of Michigan and began their teaching careers there.

From the time he arrived in Parkland in 1935, Dr. Leraas sang the praises of the Northwest and Pacific Lutheran. Finally in 1947, when the post-war enrollment boom allowed expansion of the biology faculty, Leraas persuaded Dr. Ostenson to come west. Ostenson had earned his Ph.D. in zoology.

#### Irene Creso

Biologists and students studying the flora of Pierce County for many years to come will benefit from the more than 30 years of effort by Dr. Irene Creso.

Since the mid-'60s, Dr. Creso, now 78, has collected, preserved and verified over 6,000 specimens of plants now located in PLU's Creso Herbarium The herbarium has been relocated, and will be an integral part of the PLU biology program in the Rieke Science Center.

Originally appointed to the PLU faculty in 1947, Creso returned to University of Puget Sound, her alma mater, from 1956-65, but has been back at PLU since. She quit full-time teaching in 1971, officially retired in 1975, but has continued some teaching and involvement with the PLU biology department during the past decade.

Her post-retirement projects have included a Pierce County floristic study and books on Western Washington flowering plants and Pierce County "Twigs."

In 1979 PLU recognized her many achievements with an honorary doctor's degree, and in 1984 the Alumni Association conferred its Special Recognition Award.

\* \* \*

### Josef Running

Josef Running, another Minnesota native, was one of the several Natural Sciences faculty hired during the boom years of

For decades the pre-med and pre-dental programs at PLU have enjoyed an outstanding reputation and enviable success record. Its graduates are accepted into professional schools at more than twice the national rate.

The man given credit for establishing that reputation is Dr. Harold (Hud) Leraas, who joined the Pacific Lutheran faculty as a biology professor in 1935. Leraas himself became a dentist in the '40s and maintained a Parkland practice in addition to his teaching load until 1960. He also served in the U.S. Army during World War II.

A graduate of Luther College in Decorah, Ia., he earned his graduate degrees at the University of Michigan. He was a member of the Franklin-Pierce School Board for six years, serving as its president from 1955-58. He retired from PLU in 1969.

Now 82, he lives in Parkland near PLU. A faculty research laboratory in the new Rieke Science Center is named in his honor.

#### **Robert C. Olsen**

After World War II, enrollment at Pacific Lutheran increased rapidly with returning GIs. A science building was built in 1947 and several new science faculty members were appointed.

Robert C. Olsen became the

During his 30 years on the PLU faculty, Ostenson created and taught numerous courses while serving continuously as chairman of the biology department, then general science, and finally earth sciences.

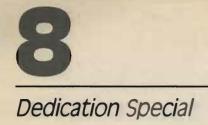
"In addition to its strong preprofessional program, PLU has been consistently strong in field biology," Ostenson said. A number of PLU alumni have become prominent in that field.

Ostenson has conducted research in the Arctic under the auspices of the Atomic Energy Commission and the Antarctic for the National Science Foundation. A museum in the new Rieke Science Center will be named in his honor. the late '40s. He was a mathematics teacher.

Running came to PLU late in a long teaching career that had begun in 1916. Arriving in Parkland in 1948, he retired in 1960.

He earned his bachelor's degree at St. Olaf College in Northfield, Minn., and his master's degree at the University of Minnesota in 1941.

Much of his teaching career was spent in secondary schools in North and South Dakota. Perhaps due to that experience, he was particularly effective with beginning students at PLU. One colleague said, "He had a talent for making it seem logical and easy." Now 87, Running lives in Portland, Ore.



# The realization of a dream

New Chinese Ties Renew Cultural Bond For Eminent PLU Physicist

### **By Jim Peterson**

Fourteen-year-old Kwong-Tin Tang fled China with his parents in 1950, shortly after the takeover of his homeland by the communists.

The 34 years since that hurried departure have been largely ones of tragedy for the people of his country. Tang has lived with that tragedy, even as he established a reputation as one of the world's elite research scientists.

This past spring the Pacific Lutheran University physics professor was welcomed back to China to deliver a series of lectures on atomic and molecular physics. Chengdu University of Science and Technology made him an honorary professor and gave him an open invitation to return whenever he could.

Tang's reaction to the opportunity to return home reflected the concern and love for people that has marked his career.

"There is no question that what communism has done to China has been a disaster," he said. "But China is awakening from that nightmare," he continued, citing late October announcements of further economic policy changes in the Peoples' Republic as further evidence of that awakening. "What is important is how policies affect people's lives, not what they call their system."

Tang believes that living conditions in his homeland are improving and there are more individual freedoms. For that reason he is happy to share his knowledge with his Chinese colleagues.

"If there is anything I can do to help in some small way. . ." he mused.



K. T. Tang

to my teaching. It gives me enthusiasm. If I am not enthusiastic, I can't impart it to my students.

"It is gratifying when, with some students, it clicks, and it may change the course of their lives," he observed. Tang recalls one mid-70s "confused an muddled" freshman who became the best student in the class. Later the student did graduate work at Columbia and University of Southern California. He has since been a successful engineer for Bell Laboratories and IBM and has taught compuregular speaking and research visits to Max Planck Institute in Gottingen, Germany. Oxford University in England, Canada and Hong Kong are other international stops on his speaking itinerary.

He has made frequent visits to Hong Kong and Taiwan, often returning with promising prospective PLU students. Over the years he has "recruited" more than 100 students. And he is helping Academy Sinica, Taiwan's highest academy, establish an institute of atomic and molecular science.

Tang's desire to help changed the direction of his career 17 years ago. Options could have been plentiful after he earned his doctorate in physics at Columbia University in 1965. For three years the University of Washington alumnus had been a senior basic research scientist at the Boeing Company in Newport Beach, Calif., and designed a computer program that vastly improved the company's production rate of crystal filters. Though his career star was rising, he was dissatisfied.

"I wanted to go back to what I loved most — teaching," he recalled. "My parents wanted me closer to their home in Seattle, and we are Lutherans, so they suggested PLU. I came because I was impressed with President (Robert) Mcrtvedt; I decided to stay because of the comfort he extended to me when my mother died in 1969. I then believed PLU was a place where I could place my loyalty."

Tang continues to believe teaching is his calling in spite of his growing international eminence. The research that earns him acclaim interests him "because it contributes ter science at the University of Colorado.

Not only have many of his students become successful professionals, many have become personal friends.

Though he has cut back his research grant proposals in recent years, he has received over a quarter million grant dollars from such sources as National Science Foundation, Research Corporation and Petroleum Research Fund. A sophisticated computer in his office ("Even better than the university mainframe for some scientific work") which makes much of his research feasible and which he shares with students, is the practical result of some grant money. He has taken students as partners on many of the research projects that have resulted in over 70 publications in professional journals.

Tang's reputation has attracted many more speaking invitations than he can accept. One he did accept several years ago was from an international conference on atomic and molecular collisions in Norway, where he was one of five featured speakers. He makes There are already university exchange agreements with institutions in Taiwan and the PRC and there have been student and faculty exchanges in both directions. In mid-October, a delegation of scientists from Chengdu University, visiting Washington State on a sister-state/province tour, made a special point of stopping at PLU. They expressed interest in closer ties, and another exchange agreement is a possibility.

Of more than 1,000 institutions of higher education in China, Chengdu is one of only 37 designated as "key" universities. One of its formally assigned missions: to develop atomic and molecular science in China.

Tang's and PLU's China connections may be only beginning. For the university, and for international relations, the connections will mean mutual benefits and improved understanding.

For Tang, it may mean the gradual healing of a deeply personal, cultural wound and the realization of dreams that for long had seemed never to be fulfilled.