



3-1976

March 1976

University of North Dakota Alumni Association

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Recommended Citation

University of North Dakota Alumni Association, "March 1976" (1976). *UND Alumni Review*. 434.
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Spring enrollment sets record high

A record 8,377 students have enrolled for the University of North Dakota's spring semester, up 6.7 per cent from the previous year, according to Milford Ulven, UND registrar.

The previous high mark, he noted, was 8,067, recorded in 1972. Last year's spring enrollment was 7,850.

Ulven said the University continues to enjoy a good retention rate for its students, due in part to the tight economic situation and the good availability of financial aid for college.

This spring's figure represents a slightly lower than normal attrition from last fall's record enrollment of 8,632, Ulven observed. More than 450 students

were graduated during mid-year commencement exercises in December.

The tuition reciprocity agreement with Minnesota appears to be having a very positive impact on UND, he added.

A pleasantly surprising aspect, said Ulven, is the continued growth of enrollment in the Graduate School. This spring's mark of 1,343

is a 15 per cent increase over this fall and a 22 per cent increase over the previous spring enrollment. He added that the figure was one of the highest for the school in recent years.

Among the factors contributing to this growth, he said, are the new master of public administration degree program in Bismarck and increased participation in the

UND-AFIT (Air Force Institute of Technology) program.

This pattern of growth is evident throughout the University, with nine of UND's 11 colleges and schools showing increases over the 1974-75 spring semester.

Enrollment by classes, with last year's figures included in parentheses, is: freshmen, 1,353 (1,173); sophomores, 1,635 (1,556); juniors, 1,373 (1,509); seniors, 2,067 (1,916); special, 146 (190); professional, 460 (409); graduate, 1,343 (1,097).

New transfer students, noted Ulven, are up 32 per cent from the previous spring—from 206 to 273. New freshmen, however, number 28 fewer, from 247 to 219.

The number of women students grew ten per cent from the preceding year, from 3,213 to 3,525. Male students number 4,852 and made up 58 per cent of the student body.

The University of North Dakota alumni review

VOL. LVIII

GRAND FORKS, NORTH DAKOTA MARCH, 1976

NO. 2

Med Tech M.S. degree now offered

The University of North Dakota Graduate School now is offering a Master of Science degree in medical technology, according to Jean Saumur, associate professor of pathology and associate director of the medical technology program.

The degree, offered through the department of pathology at the North Dakota School of Medicine, began last fall and is designed primarily for medical technologists who want to teach and to coordinate a medical technology curriculum or to administrate a medical laboratory, Saumur said.

Students may choose to emphasize an area within the field of laboratory medicine after first completing a core of course work from the basic sciences, she added. This core includes biochemistry, microbiology, physiology, anatomy and a path-laboratory medicine core.

The M.S. degree in medical technology is offered with a non-thesis option, so students may select minors in one of the basic medical sciences, management or in related fields which include courses from the Center for Teaching and Learning.



DR. A. K. SAIKI (center), recent Sioux Award recipient, chats with Dr. Robert Painter (left) of the North Dakota State Board of Higher Education and Dr. Les Wold, '36, of Fargo, N.D. For details on this special Sioux Award presentation, see page 2.



UND's CHORUS has been invited to visit Romania for three weeks this summer, according to Dr. David Stocker, director. The trip, to take place between the end of spring semester in May and the beginning of UND's summer session, is expected to include about a dozen formal concerts in Romania and a command performance before President Nicholas Ceausescu. Stocker said the Romanian government and a private New York organization known as Friendship Ambassadors will pay nearly half the cost of the trip; and the 50 Chorus members are conducting a fund-raising drive to help keep student cost to a minimum. Above, Dr. Stocker (at left) discusses some of the music planned for the trip with Chorus member Randolph Cross of Carswell AFB, Tex.

Program innovations help maintain students' interest in languages study

In a time of severe enrollment drops for its counterparts across the nation, the languages department of the University of North Dakota is alive and well, reports Paul Schwartz, department chairman.

This nationwide drop in language study, said Schwartz, can be attributed to the declining number of available teaching positions. Teaching, he said, has been the most likely field for the person who majored solely in languages.

UND's program, by contrast, has remained healthy, with 1,300 students enrolling in language courses. One of the reasons for this, continued Schwartz, is the department's practice of encouraging students to seek double majors.

Graduates with a background in both business and a foreign language, for example, can take advantage of many specialized opportunities, he said.

Many students, he noted, are earning a double major with English because this increases their chances of finding a teaching position.

The most popular languages at UND appear to be Spanish, German and French, Schwartz said. The department also offers majors in Russian studies, Scandinavian languages, Latin and classical languages.

UND language students are encouraged to travel and study

abroad. Academic credit and some scholarships are available to aid them.

Language programs abroad are moving away from emphasis on strict study, Schwartz said.

"We allow students to do pretty much what they want," he said. "A person can learn a lot just from living in a foreign country."

UND students abroad may live with families, work or just travel. The only requirements for UND's overseas program are that the

student study a language for at least two years before applying and then visit the country whose language he or she has studied.

With University-sponsored flights making it possible for more and more students to visit Europe, they are finding the trip easier and more enjoyable because they have studied the language beforehand, Schwartz said.

"The study of language opens up a whole new world of experiences, friendships and understanding," he said.

Nurse practitioner program to begin

The department of community medicine at the University of North Dakota School of Medicine now is accepting applications for the next class in its Family Nurse Practitioner Program.

Each applicant must be licensed currently as a registered nurse and sponsored by a physician.

The 12-month program, which begins May 17, is aimed toward preparing the nurse to work collaboratively with a physician as a means of expanding delivery of health services, according to Mrs. Mickey Knutson, assistant professor of community medicine and director of the program.

It consists of four months of instruction at the UND School of Medicine and eight months of internship under the supervision of a

practicing physician. Students may select specialized options in surgery, pediatrics, obstetrics/gynecology or mental health.

The family nurse practitioner, according to Knutson, is prepared to provide primary health care to individuals and to families. The functions include history taking and complete physical examinations, management of common acute symptoms, emergency treatment and management of chronic stable conditions, all performed under the supervision of a physician.

Further information can be obtained from Mrs. Mickey Knutson, Family Nurse Practitioner Program, Minot State Campus, Minot, ND 58701.

REPORT from the CAMPUS

By EARL STRINDEN



Saturday Jan. 30 was a very special day for the Alumni Association. More than 100 friends and former students of Dr. A. K. Saiki gathered in Grand Forks to honor this great educator and to present him with a Sioux Award. Dr. Saiki's career epitomizes dedication to teaching and concern for students. The letters to him which arrived from all points in the nation spoke to this in a very touching way.

Art's story is one which is worth repeating. I'm sure his grade school principal never expected that his \$40 investment in a young student would reach far, the little island of Kauai in the Hawaiian chain to the University of North Dakota campus and to a career which benefited and influenced hundreds of medical doctors.

Art's parents were immigrants from Japan who could neither read nor write and spoke only Japanese. His father worked for \$8 a month in the cane fields and did just a few months before Art finished grade school.

His grade school principal gave him \$40 to tide him over until he could secure a job, a place to live and enroll in the closest high school, which was in Honolulu. From that time Art was on his own, working his way through high school and the University of Hawaii.

When he arrived at UND in 1925, he continued working—including stoking furnaces—until his graduation with a bachelors degree in medicine in 1928. He received his M.D. degree from the University of Nebraska and returned to UND as a member of the UND Medical School faculty in 1928.

Art is a very perceptive and sensitive individual. As a teacher he has lived a personal philosophy that "Teachers should teach—not judge." Even though he now has a hearing loss as a result of a drug reaction from TB treatments many years ago, Art still loves to visit and recently expressed this view about the three qualities which a good doctor must have.

"They must be careful, honest and humble. They need the care to make sure the right answer is found for a medical problem, the honesty to admit when they are wrong and the humility to know their own limitations and to seek help from others when not sure of their diagnosis," he said.

In nearly 50 years, Art has applied this philosophy and his vast medical knowledge and experience for the benefit of hundreds of UND students. One former student, Dr. Tom Mar, '38, who lives and practices medicine in Kailua-Kona, Hawaii, recently expressed these thoughts about Dr. Saiki: "His devotion to his students and profession in depth and sincerity is unmatched. To have known him is a priceless experience. His philosophy that he is there to teach and guide and not to judge or throw roadblocks has endeared him to all who have come in contact with him."

Widowed in 1938, Dr. Saiki has two sons, George, '60, living in Bismarck, N.D., and John, a 1959 graduate of the University of North Dakota Medical School now living in Albuquerque, N.M.

Congratulations, Dr. A. K. Saiki, and thank you for your dedication to UND, your students and your medicine!!

* * * * *

This issue of the Alumni Review carries a feature story about Terrance Leonhardy and his experiences as a career diplomat. It was written by Don Jacob, a 1969 UND journalism graduate. As you probably have noticed, we are utilizing the talents of some of our journalism graduates for Alumni Review feature articles. We appreciate very much their cooperation, for they enable the Alumni Review staff to bring you interesting articles about members of the alumni family who now are living at points far from the campus.

Recent articles were authored by John Fields, ex '35, vice

president for development at Northwestern University; Franklin Vikan, '34, Fosston, Minn.; Bill Turkula, '74, Fargo, N.D.; and Gary Wigdahl, '65, Rothsay, Minn. We're very appreciative of these volunteers who help to bring a more interesting Alumni Review to all of you. We will be involving more of our graduates in developing future feature stories.

* * * * *

I hope you will look over the alumni reunion schedule; and if there is a reunion in your area, please do attend. Transplanted North Dakotans and UND'ers love to get together for an evening of visiting and enjoyable conversation. We have a slide with sound show which will be presented at most of our reunions, giving everyone an up-date as to what's happening at UND.

This issue also carries information about Alumni Days 1976 on the UND campus. May is a great time of the year to return to the banks of the English Coulee. You all are invited, but a special invitation is extended to the 50 and 40-year class reunion members and their classmates.

We will give a report on the Mazatlan, Mexico, UND charter in the next issue. We were delighted with the response. The plane was full and, unfortunately, we were not able to accommodate all who wanted to go. Please watch the Alumni Review for information about the 1977 winter charter. We already are beginning to make preliminary plans.

Inquiries are arriving almost every day about our Bavarian Holiday, scheduled for next September. There still is room, and if you are interested in an opportunity to spend an autumn week in the beautiful Bavarian Alps at a very reasonable price, please contact the Alumni Office.

Please note the ad about a new program for the University College of Continuing Education and the Alumni Association—THE ALUMNI UNIVERSITY. We have been very pleased with the response to our first story about this in the January Review.

This is an opportunity for alumni and their families to spend a relaxed week on the campus learning from some of our distinguished faculty and with ample time for leisure and recreation. Contact the Alumni Office if you desire additional information.

* * * * *

We do hope your plans for 1976 will include a trip back to the campus either for Alumni Days in May, during the summer vacation months or for Homecoming next October. Remember, our offices are on the fourth floor of Twamley Hall and we always enjoy having a cup of coffee and a visit with the members of our alumni family. We also look forward to showing off the campus and the many new facilities.

We appreciate the letters and cards which are arriving in increasing numbers. Your friends and classmates want to read about you in the news notes section of the Review, so keep us informed.



EARL STRINDEN (left) presents the Sioux Award to Dr. A. K. Saiki at a special Jan. 30 presentation luncheon in Grand Forks. Helping to bestow the honor is Dr. Phil Dahl, '48, '49, of Bismarck, N.D.

News Notes / Alumni of the 30's-40's

Robert Kunkel, '38, has written a series of five-minute radio shows

titled "Indiana—in the Bicentennial Spirit" which will be broadcast over an Indiana radio station. He lives in Michigan City, Ind.

Dr. Donald Bahr, '48, is a radiologist at the Kaiser Foundation Hospital, Harbor City, Calif. He is associated with the Permanente Medical Group and for several years has directed the nuclear medicine and ultra sound sections.

David Drey, '49, recently opened a new law office in Minot, N.D. He previously was with Farhart, Rasmuson, Olson & Lian, P. C., also in Minot, where he lives with his family.

Paul Bossoletti, '49, has retired from the Federal Aviation Administration where he was the electronic maintenance technician in charge at Grand Forks, N.D., International Airport. He lives with his family in Grand Forks.

Students need summer jobs

More than 4,000 University of North Dakota students are looking for summer jobs to help finance their educations. Most will accept any type of employment, although many have specific skills that could benefit employers.

If you have a summer job opening you would like to be made known to UND students, contact Renee Peck, Student Financial Aids, Box 8131, University Station, Grand Forks, ND 58202.

News Notes / Alumni of the 20's-30's

Lois Vander Veer (Jones, '28) and her husband make their home in Delmar, N.Y. After returning from a trip to Virginia and Gettysburg, Pa., they will take a three month cruise around the world this winter.

Dr. Charles L. Allen, '24, now is a consultant in Communication, Research and Management in Santa Barbara, Calif. The author of nine books, the latest titled "Communications Patterns in Hong Kong," he was the first UND graduate in journalism.

Byron Fahl, '26 and his wife Alice (Vary, '26) have retired

from their teaching positions at St. Marys College in St. Marys City, Md. They stay active with community and church work and also like to garden and travel. Their home now is in Marshfield, Wis.

Zella Zoe Larimer, '23, does volunteer work for the Region III Rehabilitation Service of the U.S. Department of Health, Education and Welfare. She lives in Philadelphia, Pa.

Jeannette Wheeler (Norris, '39) lives in Reno, Nev., where her husband, George, UND professor emeritus of biology, does extensive studies on ants and ant larvae.

Travel with UND on a

Bavarian Holiday

Sept. 14-22, 1976

Based in the small Alpine village of Inzell in the Bavarian area of Germany, your holiday will be in a setting of high mountains, beautiful lakes, romantic towns and baroque splendor in luxurious royal palaces. Here you'll find fine beer, white sausage, Oktoberfest, folk music — and much more!

FOR ONLY \$689 (plus \$6 airport tax)
YOUR HOLIDAY INCLUDES:

- * Round trip air transportation by charter jet from Minneapolis, Minn., to Munich, Germany, including food and beverages.
- * Free use of a rental car with unlimited mileage allowance and deductible collision insurance (exclusive of gasoline).
- * Eight days and seven nights in a tourist-style Inn, two persons per room, including service charges and taxes.
- * Breakfast and delicious dinner served daily.
- * Bavarian holiday escort service throughout the tour.



INZELL, located between Salzburg, Austria (1/2 hour drive) and Munich, Germany (1 1/2 hour drive), also is a perfect base for visits to Innsbruck (2 hour drive) and numerous other colorful Bavarian towns. There's no regimentation on this tour, so you can see Europe at your own pace and from the comfort of your own private car.

THE RESERVATIONS DEADLINE IS MAY 31, SO RETURN THIS INFORMATION REQUEST FORM TODAY!

Reservations will be accepted on a "first come" basis; and single accommodations are available for a slight additional charge.

UND ALUMNI TOURS
P.O. BOX 8157 UNIVERSITY STATION
GRAND FORKS, ND 58202

PLEASE SEND ME INFORMATION AND BROCHURES DESCRIBING THE ALUMNI ASSOCIATION'S BAVARIAN TOUR, SEPTEMBER 14 - 22, 1976.

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE NO. _____

LEEWAY Sioux Sports Smoke Signals

By LEE BOHNET, '51
Sports Information Director



February has been one of the busiest athletic months of the year at UND. Conference basketball and hockey races wound down and the excitement of the closer races gripped the campus and area.

In addition, wrestlers, gymnasts, swimmers and indoor trackmen were preparing for conference meets to close out their seasons; and the North Dakota high school hockey tournament invaded the Winter Sports Center for a half-week run.

And, we know that spring and summer are not far behind when we see Coach Harold (Pinky) Kraft run the Sioux baseball team through its paces indoors.

Right now basketball is the major topic of the area. The Sioux are locked in a tie with Mankato State, with 8-2 records, as this is written. We are confident the Sioux can win their third straight North Central Conference championship, but it isn't going to be easy.

Four of our last six NCC games were on the road, and at the four toughest places to play in the loop—Morningside, University of South Dakota, Augustana, and South Dakota State. Our last two home games were against Mankato State and Northern Iowa.

As reported in the last issue, we finished third in the 11th annual North Central Conference holiday tournament and immediately began regular loop play. In our first conference game, we hosted North Dakota State and beat the Bison, 75-57, as 8,000 fans watched a superbly played game. That, to some extent, made up for the last-second loss we suffered against the Bison in the semi-final round of the holiday tourney.

Our Jan. 16 game was one that should live long in the memory of those who witnessed it. We beat University of South Dakota, 101-91, in one overtime. The incredible Sioux, down 20 points with 10:30 left to play, came back to tie the game and send it into overtime. The crowd at that game was nearly as important as the players. They simply refused to let the team quit. It was a sight to behold. And, the Sioux had little trouble the next night in manhandling Morningside, 82-64.

Our first trip of the season resulted in a 79-67 loss at Mankato State and an 88-69 win at Northern Iowa. Returning home, the Sioux subdued Augustana, 81-72, and South Dakota State, 72-63, to run our home floor winning streak to 29 games.

Coach Dave Gunther has had excellent play from 6-10 senior center Mark Lindahl; 6-5 senior forward Bob Otto of Willmar, Minn.; 6-6 senior forward-center John Thorpe of Bismarck, N.D.; 6-2 senior guard Jim Goodrich of Madrid, Iowa; and 6-1 junior guard David Dickey of Canton, Ohio. Those five have started in recent games.

Other top performers have been 5-10 senior guard Rick Fischer of Manitowish, Wis.; 6-6 senior forward Bob Eaglestaff of Fort Yates, N.D.; and 6-7 freshman forward Chris Fahrback of Menasha, Wis.

Our skaters are battling hard for a Western Collegiate Hockey Assn. post-season playoff spot. The Sioux have missed the playoffs the last two seasons, but we believe this team will make the grade.

As this is written we have a 13-17-0 overall hockey record and are tied for eighth place in the WCHA with Denver University on a 10-16-0 mark. Since the last report here's what has happened to the skaters: Notre Dame, a big, tough team, beat the Sioux on home ice in early January by identical 5-3 scores. The team then took to the road to sweep at Wisconsin, winning 5-2 and 6-5 in overtime. Returning home the Sioux swept a pair from Colorado College by 4-2 and 3-2 scores.

Back on the road, the Sioux lost their touch and bowed to Denver twice by 8-4 and 7-2. Playing mighty Michigan on home ice, the Sioux took a 2-1 loss for the first game, but claimed a solid 6-2 decision in the second match. In

another home series, they split with Minnesota-Duluth, winning 6-2 and losing 5-2. They also split on Michigan State ice, with a 6-2 victory and a 7-1 loss.

It's difficult for your correspondent to fault this hockey team, for they are one of the hardest-working and enthusiastic teams we've ever had. They've beaten some of the best teams in the country including Michigan Tech, Michigan State and Minnesota. Yes, they are inconsistent. But it never can be said they don't try, and try very hard, in every game.

In this is written we most recently have split a series at Michigan State, which has one of the most explosive teams in the country.

The Sioux went to Michigan Tech, on February 20-21, where even a pro team would find it hard to win. Then, we were at home February 27-28 against Denver; and we closed out the regular season here March 5-6 against Minnesota.

Our wrestlers have done well this season. The improvement made in this sport in the past two years is impressive, but we must report our team hasn't reached the point where it can effectively challenge the Big Four of the North Central Conference, all of whom are highly nationally ranked—Northern Iowa, Mankato State, North Dakota State and South Dakota State. But we are improving and in another season could challenge that elite group.

Our dual meet record now is 4-4 and was expected to be 12-4 when we entered the conference tour-

nament late in February at Mankato State. Our top wrestlers this season have been 150-pounder Ken Gabriel, a junior from Bismarck, N.D., who has a 17-1 season record; 142-pound freshman Pete Krantz of Hastings, Minn., who is 11-5-0; Rick Lee, a 177-pound 1975 Illinois All American from Jamestown, N.D., who has a 14-2-0 record; and Brian Hanson, 126-pound freshman from Bismarck, N.D., who shows a 7-2-1 mark.

On the gymnastic front, the Sioux have improved and now own a 5-5 season record. Top men for the gymnasts have been junior Bill Abelson of Brooklyn Center, Minn., and sophomore Johnnie Johnson of Miami Springs, Fla.

Our swimming team, under the direction of football defensive backfield coach Pat Behrens, also has done well in some meets this winter, but it has been inconsistent. Behrens, however, was confident the Sioux would hit their peak during the conference meet in late February. He hopes sophomore sprinter Doug Williams of Thief River Falls, Minn., will qualify for the national NCAA Division II meet.

The Sioux indoor track and field team thumped the University of Manitoba, 95-25, in its first home indoor meet of the season. Bob Fransen, junior from Coleharbor, N.D., won three firsts in the meet—a 6-5 high jump, 42-1 triple jump and 6,7 50-yard intermediate hurdle race.

And with baseballs now beginning to fly around in the fieldhouse arena, we know warmer days are ahead.

Basketball player Bob Eaglestaff is UND's "True Sioux" athlete

By DAN QUANDT

"I personally like the run and gun style." While that statement may sound like a quote from a 1920's vintage-movie gangster, the speaker actually is Bob Eaglestaff, UND senior and reserve forward for the Sioux basketball team.

"Run and gun" is the style of basketball Eaglestaff used while playing high school basketball at Fort Yates, N.D. In fact, he used it so well that he scored 69 points in one game—a North Dakota high school record.

After completing high school, Eaglestaff attended Brigham Young University, Provo, Utah, for a year and a half. He greatly admired the facilities and tradition that Brigham Young had built in basketball, but found the school regulations too confining, and so returned to North Dakota to complete his education and University basketball career.

At UND, Eaglestaff's fast moving style of play has been redirected into Coach Dave Gunther's play and team-oriented strategy.

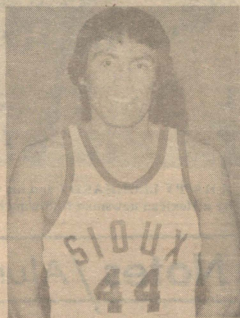
"Coach Gunther really emphasizes the team aspect. He'd much rather have a team than one player," Eaglestaff explained. He thus stopped being a singular-type player and has become a Sioux team player.

For Eaglestaff, raised in Eagle Butte, S.D., on the Cheyenne River Indian Reservation, being a Sioux means much more than his University's team nickname. He is nearly three-quarters Sioux Indian (the other part of his ethnic background is French).

And he takes his Sioux Indian heritage at least as seriously as his Sioux sportsmanship. Eaglestaff holds a deep concern for the welfare of American Indians, especially the youth, and plans on taking a position as director of the American Indian Sports Association after his May graduation from UND. In that job, he will be coordinating the sports activities of 48 Indian reservations in a seven-state area.

While his main concern at present continues to be UND basketball, he no longer is the consistently high scorer he was in past years. One reason for this, Eaglestaff feels, is the great pressure in college basketball.

His pre-season shoulder injury also is a source of concern. Though there no longer is any physical pain, he says, "I find myself favoring my arm. I'm trying to get that out of my mind, but it's always there."



Bob Eaglestaff

He says one of the greatest changes from his high school basketball style has been to the Sioux's team play emphasis. Though he still prefers the "run and gun," he now is a firm believer in Coach Gunther's philosophy.

Proposed Amendment To Constitution of the Alumni Association of the University of North Dakota

Article III, Section 1.—The directors of the association shall consist of ((twenty-three)), twenty-four members, with the President of the University of North Dakota and its Vice-President for Finance and Vice-President for Operations being ex-officio members.

News Notes / Alumni of the 1940's-50's

Chester Clemetson, '40, has retired from his position in the atomic products engineering department at General Electric Company, San Jose, Calif. He worked in instrument control engineering of atomic control systems. He now makes his home in Richland, Wa.

Walter H. Wheeler, '42, is a geology professor at the University of North Carolina, Chapel Hill. His wife is the former Eula Krueger, ex '41.

Jack Banik, '50, is the national account manager for Nalco Chemical Company in Houston, Tex. He is married to the former Elrose Loftus, ex '49.

William L. Hall, '53, lives with his family in Buffalo Grove, Ill., where he is regional sales manager for Prescolite.

John McLellan, '53, recently retired after a 37-year career in education. His last position was superintendent of Broadwater County High School in Townsend, Mont. During his years in education, he coached football, basketball and track, as well as teaching social sciences. He continues to live in Townsend and is planning a trip to Europe this summer.

Dr. Donald Lamb, '54, is in practice in Fargo, N.D., as a specialist in plastic and reconstructive surgery; in maxillofacial surgery and surgery of the hand. He and his wife Mary (Wright, ex '53) live in Fargo.

Vance Williams, '55, now is senior vice president of the First National Bank of the Black Hills, Rapid City, S.D. His wife is the former Joan Vahna, ex '55.

Lyle Fralich, '57, currently is co-owner of two Shakey's Pizza Parlors in Indiana. A third parlor will open this winter. He lives with his family in Calumet City, Ill.

Wayne Engbretson, '55, is a legal rating specialist with the Veterans Administration regional office in Montgomery, Ala.

Lowell Lykken, '58, is manager of analysis and software at Lear Siegler, Inc., Astronics Division in St. Louis, Mo. He and his family reside in Westlake Village.

Robert Gilsdorf, '58, '59, now is director of surgical education at the Good Samaritan Hospital in Phoenix, Ariz., where he lives with his wife Marilyn (Rohde, '57).

Bill Feeney, ex '58, operates a boating center in Watford City, N.D., where he lives with his family. He recently was appointed to the Watford City Council and will serve until the next biennial city election.

Denley McKenzie, '50, recently was elected to the Board of Directors of Northwest Buyers and Jobbers, Inc. He and his wife Mary (Schmitt, '50) live in Williston, where he is proprietor of the Model Clothing House.

Field narrows in search for new athletic director

Working with a slate of more than 80 candidates, the faculty-student search committee for a new athletic director at UND has narrowed its recommendations and hopes to submit names of three candidates to President Thomas Clifford for his study by March 15, according to Dr. Walter Koenig, search committee chairman.

"At this time," Koenig said in mid-February, "we are considering 15 candidates and will attempt to screen these down to from five to seven, all of whom will be invited to the campus for interviews. One candidate, a unanimous choice of the committee, has been contacted relative to a campus visitation."

"Our committee, working with more than 80 applicants, has agreed certain candidates are stronger than others. Candidates we no longer are considering have been informed," Koenig said.

Leonard Marti, on the UND staff since 1946 and athletic director since 1958, will retire June 30. Marti at one time held the dual title of athletic director and chairman of the department of health, physical education and recreation, but has held the sole position as athletic director since 1973.

Koenig said after President Clifford has reviewed the names of the final three candidates he will announce his choice and submit his candidate to the North Dakota Board of Higher Education for confirmation. The committee seeks to have the new director on the job April 1 or soon thereafter, Koenig added.

Qualifications announced by the committee in its flyers advertising the position nationally include: background in public relations; experience in organization and administration, preferably in athletics; fund-raising experience; an advanced degree, preferably in health, physical education and recreation with a doctorate preferred; and coaching and teaching experience in the field.

ALUMNI REVIEW University of North Dakota

The University of North Dakota Alumni Review is an official publication of the University of North Dakota, Grand Forks, N.D. 58202. Published monthly except for February, July and August by the University of North Dakota. All correspondence in the interest of the University of North Dakota, Second class postage paid at Grand Forks, N.D. 58202. All corrections and address correction forms should be sent to the Alumni Review, University Station, Grand Forks, N.D. 58202. Editorial assistance provided by the Office of University Relations, University of North Dakota, Rosemary Vocino, Editor.

Foreign service career included kidnapping by Mexican terrorists

Don Jacob, '69, '72, holds B.S.Ed. and M.A. (Communications) degrees from UND. He currently is serving in Washington, D.C., as legislative assistant to North Dakota Congressman Mark Andrews. Don was News Coordinator in UND's Office of University Relations from 1968 through 1973.

By DON JACOB

Diplomacy is defined as the skill of handling affairs without hostility. Few diplomats have had this skill more critically tested than has Terrance Leonhardy, a 1937 UND graduate.

On the eve of retiring after 31 years in foreign service, Leonhardy was kidnapped by Mexican terrorists in Guadalajara, where he was U.S. Consul General. For four days, he was held captive, and his years of promoting peace between nations seemed near a violent end.



Terrance Leonhardy

A relaxed Leonhardy now lives in retirement in the shadows of high-level diplomacy, just a few blocks from Embassy Row in Washington, D.C. In this environment and with the passing of time, he now can examine his abduction in the spring of 1973 within the framework of today's politics of terror.

"Back home again with my wife (also a retired foreign service officer) and my two daughters, I now have the peace of mind and time to look at this incident objectively and to put it in perspective," Leonhardy said in reasoned manner.

"I often ask myself how my personal experience fits into the overall picture of political terrorism which seems all too commonplace today. I sometimes wonder if reason is giving way to violent outlets of political frustration."

Leonhardy said he believes terrorism is threatening because it sometimes works because of insufficient law enforcement. "Too often the demands of extremists are met, leading to more unreasonable demands."

Leonhardy is mindful that if his views were practiced, he probably would not be alive to express them. His life was exchanged for 30 political prisoners, one million pesos and a pledge by Mexican authorities that the manifesto of the extremists would be broadcast and published throughout Mexico. This was one of the largest ransoms ever paid by a government.

"As far as my captors were concerned, I was just a pawn in their dangerous game with the Mexican government—and I knew it," Leonhardy recounted. Just 18 months earlier, one of Leonhardy's closest friends was killed by terrorists in El Salvador.

Leonhardy recalled that his greatest fear was that government militiamen and police would storm the small house where he was held bound and gagged. "If this had happened, I probably would have been shot by my captors," he said.

After studying acts of terrorism in Latin America, Leonhardy concludes that they share much in common. Often, he pointed out, they are committed by idealistic young people, who, out of frustration, take the Machiavellian approach that the end justifies their means.

"They become desperate because they are making little headway toward the social and political reform they claim to seek," he added.

Leonhardy said that when he was given a rare opportunity to speak to his captors,

they generally avoided personal subjects and did little more than parrot political slogans critical of their own government and institutions.

"So-called revolutionaries such as these apparently avoid personal considerations because it makes their cold game more difficult to execute," he observed. "They perform like unemotional actors on a stage."

Leonhardy explained that during the waning hours of his captivity, he was subjected to an intense interrogation which was tape-recorded.

"Loaded questions about American foreign policy were read to me, and it was obvious that my captors were just following orders," he noted. "They were more concerned that I did what I was told, than they were with what I said."

"I had to walk a tightrope between my ideals and what I had to say to avoid endangering myself," he added.

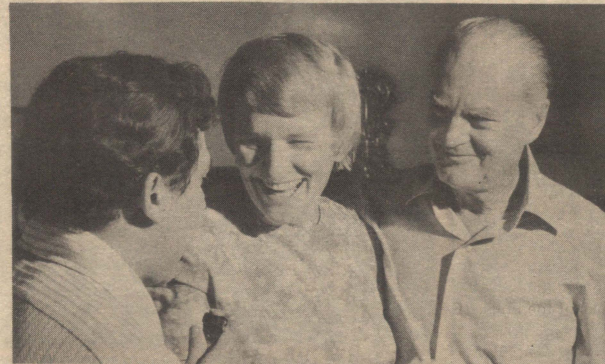
Although reluctant to tie his captors to an international movement, Leonhardy said some evidence leads to that conclusion. Since his release, some of Leonhardy's captors have been killed or captured, and information on their backgrounds has been obtained.

They are purported to be members of the "23rd of September Movement," a revolutionary band of urban guerrillas with Maoist leanings.

According to American authorities, leaders of the group have been trained in East Germany and North Korea. There is also evidence that some of the prisoners exchanged for Leonhardy went to Cuba and from there to countries behind the Iron Curtain.

Leonhardy said this group, like other Latin American terrorist organizations, attempts to follow the Cuban model.

"But," he said, "they fail at it." "Times have changed," Leonhardy observed, "and these small revolutionary groups are using outdated tactics of the 1950's. The politics of terror are failing in



A HAPPY LEONHARDY and his wife, Lee, are interviewed by a Mexican newsman following his release from captivity.



TERRANCE LEONHARDY, '37, talks with members of the press following his release from Mexican terrorists, who kidnapped and held him hostage for four days in the spring of 1973.

Latin America because social progress, although slow by American standards, is being made there.

"Cuba was ripe for revolution in the mid-1950's, but in the '70's most Latin American countries have awakened to the need for change to avoid civil unrest," he said.

Leonhardy is an expert on the Cuban experiment. He served as officer in charge of Cuban affairs for the U.S. State Department from 1955 to 1957. The Batista regime was toppled just three months after he left this post to join the American Consulate in Mexico.

"The Cuban revolution evolved from within the country, and outside influences had little to do with it," he pointed out. "In contrast, terrorist groups in Latin America today depend heavily upon outside support and influence to make up for their lack of popular appeal."

He added that few Latin Americans want to follow the fate of Cuba. "The fact that 15 per cent of the Cuban population, including the majority of the business and professional people, fled the island after the Communist takeover speaks for itself," he said.

Comparing the Cuban situation with contemporary revolutionary activities shows vast differences between the two, according to Leonhardy, who knows both firsthand. "These differences indicate that terrorist groups today do not understand the politics of revolution, and that their

tactics will only disrupt progress and eventually destroy them."

After entering the U.S. Foreign Service in 1942, Leonhardy spent all but 10 years specializing in Latin American affairs. He was vice counsel in Columbia from 1942 to 1945, followed by assignments with the U.S. embassies in Madrid and Copenhagen.

From 1955 until his retirement, he held diplomatic and counselor posts involving Cuba, Mexico and El Salvador. His last Washington post was that of Director of Mexican Affairs for the State Department, 1964-68.

With 21 years experience as a firsthand observer and student of Latin America, Leonhardy looks to the future of that part of this hemisphere with cautious optimism.

"Progress is being made," he said, "and terrorists, like those who kidnapped me, are bucking the winds of change."

Although officially retired from foreign service, Leonhardy continues an active interest in Latin America. In addition to lecturing on U.S.-Mexican relations, he works as a private consultant with a Central American development company.

His narrow escape from death three years ago does not dissuade him from returning to Latin America on business, even though he knows there may be some personal risks. "I have a job to do, and I intend to do it," he said.

Leonhardy's commitment to getting the job done, despite difficulty, is not too surprising when you get to know him. It is the story of his life, since his childhood in Williston, ND.

Overcoming a boyhood bout with a crippling bone disease, Leonhardy went on to fulfill his ambition to become a U.S. foreign service officer. There were many uncertainties along the way.

While a student at UND, he lived in Camp Depression and he worked on campus, peeling potatoes, typing papers and correcting tests to earn extra money for his expenses. He went on to earn his B.S. degree in commerce in 1937 and an M.B.A. degree two years later from Louisiana State University.

After a brief stint of college teaching, he got his start in the U.S. Foreign Service. Despite spending most of his life away from North Dakota, Leonhardy continues to maintain close ties with the state and his alma mater. He still has business interests near Williston and is president of a family corporation.

Leonhardy's successes and trials attest to the strength of his convictions and courage. This is the observation of all who know him.

News Notes / Alumni of the 1950's-60's

Gerald Protz, '58, is an engineering project manager in the Steam Power division of Brown and Root, Inc., Houston, Tex.

Raymond Russell, '51, is teaching business courses at Shakopee, Minn., High School. His wife E. Joan (Thomson, '51) is teaching English as a second language to Vietnamese refugees at Minnetonka, Minn., High School.

Myron Stroth, '58, and his wife Delores (Zimmerman, '58) recently were honored for ten years' service as a foster home for the San Diego, Calif., County Welfare Department, during which time they have shared their home with 42 foster children. They live in Imperial Beach, Calif.

Duane Torvik, '56, has been appointed vice president in charge of the Minot, N.D., branch of Wold Engineering, P.C. He lives in Minot.

Gary Sokness, '64, a U.S. Army officer, recently was appointed to the rank of

Major while attending Command and General Staff College at Fort Leavenworth, Kan.

Gordon Sellar, '60, has moved from Roseville, Minn., to Idaho Falls, Idaho, where he now is a senior quality engineer for Aerojet Nuclear Co.

Dennis J. Olson, '66, and his wife Sally (Van Veghel, '66) own Plywood Dakotas retail stores in Sioux Falls and Mitchell, S.D. They live in Sioux Falls.

Janet Pung (Christianson, '65) was chosen forum leader at the national convocation of Kappa Delta Pi, an education honor society.

Margaret Walker (Hurt, '66, '68) now is an administrative aide to an Austin, Tex., state legislator. Her husband is Tom T. Walker, ex '66.

James Nybakken, '68, now is personnel director for the San Francisco, Calif., Redevelopment Agency. He lives in Oakland, Calif.

Robert Gilbert, ex '60, is the founder and owner of Viking Belting Co. and received a patent in 1975 for a new pasting belt for the automotive battery industry. He lives in Gettysburg, Pa.

Gretchen Maloney (Moeller, '66), teaches first grade in the Osseo, Minn., school system. She and her family live in Maple Grove, Minn.

Dr. E. Jerome Hanson, Jr., '65, is associated with two other neurosurgeons in Kansas City, Mo. He and his wife Mary Anne (McElroy, '65) and son live in Mission Hills, Kan.

Larry Hileman, '66, now is a regional director for the ITT Life Insurance Corp. and president of Security Planning, Inc. He and his wife Lana (Elliott, '65) and children now live in Ft. Collins, Colo.

Lloyd Tetrault, '64, '71, currently is a research associate with United School District No. 1 in Racine, Wis. His wife is the former Diane Beck, '63, '68.

News Notes / Alumni of the 1960's

John A. Graham, '65, recently was appointed director of the North Dakota Legislative Council's professional staff. He has been a Council staff member since 1968. He lives with his family in Bismarck, N.D.

John D. Olsrud, '62, is the new assistant director of the North Dakota Legislative Council in Bismarck, N.D. He formerly was code revisor for the Council.

Dr. Ralph A. Wheeler, '64, a major in the U.S. Air Force, now is stationed at Homestead Air Force Base, Fla.

Chester E. Nelson, Jr., '61, is associate council director and the legislative auditor and budget analyst for the North Dakota Legislative Council. He lives in Bismarck.

William Monson, '60, is engaged in "hydroponic" farming—a process by which vegetables are grown in water enriched with nutrients. He lives on a farm near Rugby, N.D.

Karen Sando, ex '64, currently is the office manager for the North Dakota Legislative Council in Bismarck, N.D.

Harlan Friested, '66, recently was promoted to senior geologist with the IAPCO Division of Natomas Inc. in Jakarta, Indonesia.

Dr. Jerome Bernhoff, '62, is an orthopedic surgeon in Fargo, N.D., where he resides with his wife and family.

Patrick Logue, '62, is the author of the book "Understanding and Living with Brain Damage," written for families of brain-damaged individuals. He lives with his family at Durham, N.C., where he is assistant professor of psychology at Duke University Medical Center.

Robert Aldcorn, '68, is the regional coordinator of justice councils for the attorney general's department in Prince George, B.C., Canada.

Dr. Reed Keller, '60, has been made a Fellow of the American College of Physicians, an international society that represents specialists in internal medicine. He and his wife Mary Ann (Larsen, '61) reside in Grand Forks, N.D., where he is on the UND School of Medicine staff.

Don Kaisershot, '63, is the instructor of word processing at Bemidji Area Vocational Technical Institute in Bemidji, Minn., where he resides.

Don Bartlette, '62, recently was employed as coordinator of special services in Bloomington, Minn. The special services office is responsible for developing and coordinating services to people who are mentally retarded, physically handicapped or learning disabled.

James P. Hunt, '61, currently is employed by the U.S. government as a teacher in Balboa, C.Z.

Keith Folkert, '68, has completed a residency in internal medicine at Hennepin County General Hospital, Minneapolis, Minn., and now is practicing at the Medical Arts Clinic in Minot, N.D. He is married to the former Joan McConnell, '70.

Ronald Carpenter, '66, is presently an attorney with the Smith, Hilligan, Carpenter law firm in Bemidji, Minn. His wife is the former Carol Davidson, '66.

Jean Hamilton, '69, is the new associate editor for the Web Company's Creative Communications Division in Minneapolis, Minn. Previously the editor of the Edina, Minn., Sun Newspaper, she received the Minnesota Newspaper Association's Award for general excellence and a 1974 School Bell Award from the Minnesota Education Association.

Monty Budahl, '61, currently is a music teacher at Maranatha Baptist Bible College in Watertown, Wis., where he makes his home.

William Binek, '66, recently purchased the Byrne and Cook law firm in Bowman, N.D., where he and his wife Georgia (McCulley, '69) will make their home. Previously, Binek was an assistant states attorney for Grand Forks, N.D., County in the Juvenile Division and Georgia was employed as a teacher in the Grand Forks School System.

Donna Carlson, '67, recently received his Ph.D. degree in science education from the University of Northern Colorado, Greeley, Colo. He resides in Kearney, Neb., where he is associate professor of physical science at Kearney State College.

Donald Gjerdrum, '68, is the band director at Burnsville, Minn., High School. Last summer he and his 52-member band spent 15 days touring Scandinavia and London. They put on nine concerts and participated in the Norwegian Sesquicentennial activities in both Norway and in Minneapolis, Minn.

Richard Espeland, '66, recently was appointed director of the Central Personnel System for state employees in North Dakota. He and his wife Karen (McConnell, '65) live in Bismarck, N.D.



Leon Flancher, '68, is president of Worthington, Minn., Community College. He previously was dean of the Center for Experimental Studies at Metropolitan State College in Denver, Colo.

Clyde Eriksen, '69, is the principal at North Central High School in Rogers, N.D.

Dr. Eugene Byron, '69, is a member of the Ellendale, N.J., Area Medical Clinic P.C. He has been on its staff since 1972.

Don Heavirland, '69, is the assistant manager of Gate City Savings and Loan in Bismarck, N.D., where he makes his home.

Merlyn Huso, '69, lives in Havre, Mont., where he is office manager for Hill County Electric and Triangle Telephone, joint management cooperatives which provide electric and telephone service to north central Montana.

Dr. Robert Weir, '67, is a family practitioner in Hettinger, N.D. He also is one of the few medical doctors in the Grand Forks, N.D., region who treats patients with acupuncture.

Jerome Broadhead, '68, recently was appointed director of the North Dakota Division of Economic Opportunity. He previously served as acting director and had been deputy director since 1974. He and his wife reside in Bismarck, N.D.

William Walton, '60, has been appointed director of cost and statistics for the USS Chemicals division of United States Steel. He lives and works in the Pittsburgh, Pa., area.

John W. Hoffert, '62, is the assistant division manager for Texaco, Inc., at the newly established Omaha Division, Marketing Department-U.S. He makes his home in Omaha.

Dr. Hiram Drache, '63, is a professor of history at Concordia College in Moorhead, Minn. Last October he was featured on the NBC "Today" TV show in connection with North Dakota's Bicentennial presentation. Drache is well noted for his books on bonanza farming in North Dakota.

James H. Elliot, '67, recently was named general merchandising manager of a new J. C. Penney department store in North Riverside, Ill., a suburb of Chicago. He is married to the former Sharon Mackley, '67.

Donald A. Hanson, '66, now is employed by KDLN radio station in Detroit Lakes, Minn.

Robert Bolinske, '66, recently joined the Bismarck, N.D., law firm of Zuger & Bucklin. He previously was associated with a Minneapolis, Minn., law firm. He and his wife Mariene (Bostey, '66) live in Bismarck, N.D.

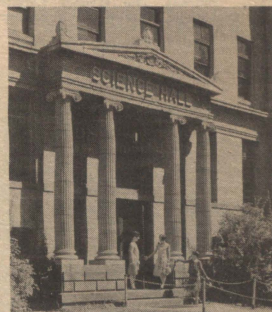
Lana Foy (French, ex '67) is an employee of the Pacific Bell Telephone Company in Sacramento, Calif. Her husband Larry Foy, ex '70, is the business development manager and co-founder of the Placer Title Company in Roseville, Calif., where they make their home.

George Rohde, '68, is a professional photographer, emphasizing photos of prairie wild and still life, mainly for sale as wall hangings at shows in North Dakota and surrounding states. He and his wife Beverly (Varberg, '67), make their home in Minot, N.D.



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. . . to relive memories of youth . . .

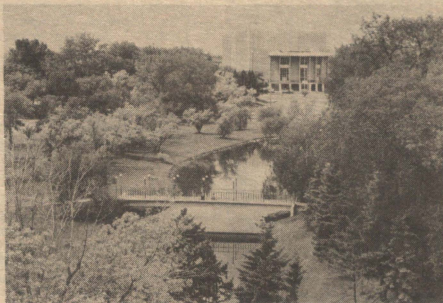
1976
UND
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Days

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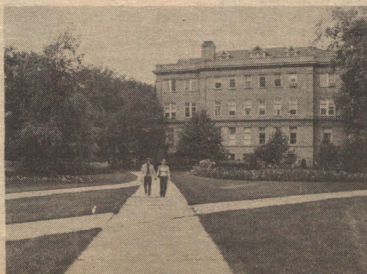
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UND'S scientists are pursuing wide range of energy research

By ROSEMARY VOCINO

Energy research has become an increasingly important aspect of the University of North Dakota's scientific function, with studies in such areas as lignite liquefaction, petroleum fields mapping, environmental impact, and even wind power receiving national attention.

Project Lignite

Among the best known of UND's current energy research efforts is Project Lignite, which is the University's largest energy-related project both in scope and cost (an estimated \$3.3 million). And, according to Project Lignite Principal Investigator Dr. Donald Severson, the study also ranks as the largest University-conducted coal research project in the United States in terms of cost, because of the great expense involved in such pilot plant research.

At the special Project Lignite research facility on campus, UND researchers are studying methods of producing high grade liquid fuels from lignite—the type of coal found in vast amounts in western North Dakota. It is estimated the state has about 360 billion tons of undeveloped lignite, which is about one-quarter of all remaining coal resources in the United States.

According to Severson, the most significant aspect of the present coal research on campus is experimentation on the ways for best adapting successful small scale laboratory research methods for lignite liquefaction into processes which could be conducted economically and continuously in large scale mass production plants.

That important research, being conducted in a special on-campus process facility, is funded by a federal Energy Research and Development Administration (ERDA) contract. The Project Lignite facility first made experimental quantities

of solvent refined lignite (SRL), the component essential to achieve lignite liquefaction, in May 1975. And, equipment now is being installed to enable upgrading the SRL to high quality liquid fuels, such as gasoline components.

The UND facility is the only one in the nation currently producing SRL—a substance which resembles shiny, glassy coal and which is hard and brittle at room temperature.

Chemistry Lignite Research

Research necessary to develop the new SRL upgrading process was conducted on campus by UND chemists, who studied the chemical structure of SRL and tested extensively to determine the best available catalysts—metals necessary in the process of converting the SRL to liquid fuel.

Dr. Kenneth Klabunde, associate professor of chemistry, explained that the Project Lignite staff asked the chemists to determine the exact chemical make-up of SRL, how all the components are bound together, and how the SRL would react under various combinations of the high temperature (about 840 degrees Fahrenheit) and high pressure (about 3,000 pounds per square inch) necessary to convert the SRL into light liquid fuels.

Klabunde said the laboratory tests conducted by he and the three other chemistry department researchers involved in the Project Lignite studies have indicated SRL can be made into liquid fuels with about 90 per cent conversion. That is, for every 100 parts of SRL, 90 parts can be converted into liquid and gas fuels—mainly liquids—and 10 parts stay behind as unreacted but could be cycled back into the process and converted further.

The ultimate goal, Severson said, is to develop methods enabling the operation of large processing plants which might, for example, process about 60,000 tons of lignite per day into approximately 250 million cubic feet of pipeline gas; 50,000 barrels of synthetic crude oil; 5,000 tons of electrode coke and a variety of other by-products. He estimates such a plant permanently would employ about 1,000 people and would require at least \$2 million in capital investment.

In predicting the earliest possible date at which a commercial lignite liquefaction plant might be feasible, Severson gave a date of about 1985—if all the stops were pulled.

Klabunde added that lignite research now is being aimed almost exclusively at liquefaction of the coal because the technique of achieving gasification is a less complex process which already has been researched to the extent that commercial gasification plants have been built and are operating successfully at several locations in the world.

Those operating plants comprise a basic model for a gasification plant which Natural Gas Pipeline Company of America (Natural) proposes to construct in Dunn County, N.D.

Prior to any North Dakota construction, however, there must be extensive environmental and other scientific tests conducted in the site area. UND is conducting some of those tests for Natural through its Engineering Experiment Station.

The PEAR Project

Dr. Mason Semerville, assistant professor of mechanical engineering and manager of the Experiment Station, said the UND geologists, chemists and engineers working on the current Phase II PEAR (Preliminary Environmental Assessment Report) Project completed their on-site work last summer, except for some continuing base-line studies.

Phase I of the PEAR Project, also conducted by the EES, was completed in late 1974. It involved gathering and studying all currently available data regarding the environmental impact of various other coal gasification plants around the world.

Phase II, which began in May 1975 and continued through last autumn, involved studies at a 173-square-mile site in central Dunn County. There, the UND researchers conducted more than 30 different types of geology and hydrology-related tests, including tests on ground and surface water quality, geological makeup of the subsurface layers above the lignite, trace elements in the lignite and ground water flow rates and patterns.

However, some of the most crucial testing being conducted regarding the lignite-bearing areas of North Dakota has had nothing to do with the extraction or



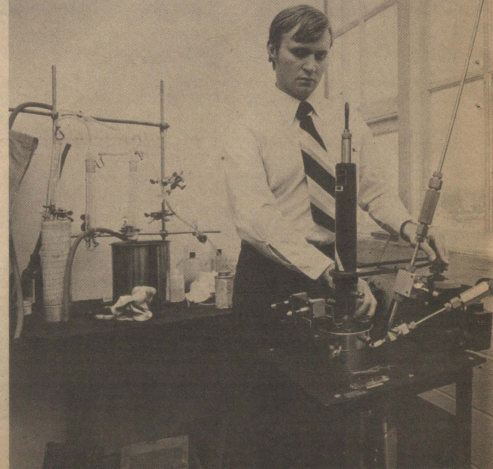
COAL being mined west of Hazen, N. D.

MIKE COUGHLIN

processing of the coal. Rather, one group of University scientists is directing its studies to the problem of returning mined lands to their original condition.

Project Reclamation

Dr. Mohan Wall, principal investigator for Project Reclamation, explained that his group of researchers are working both with experimental plots of land in the lignite-bearing areas of the state and with growth chambers at their on-campus laboratory in an effort to determine how strip-mined land (referred to as "spoil materials" or "spoil") can be reclaimed most effectively and quickly.



KENNETH KLABUNDE, associate professor of chemistry, demonstrates the workings of a high pressure autoclave used for lignite liquefaction research.

Dakota which were strip-mined as much as 50 and as recently as seven years ago, as well as locations currently being mined. Revegetation in those areas has not yet been aided by man, so they are excellent sites at which to study the conditions necessary for varying levels of revegetation.

At the Project Reclamation indoor laboratory, the biologists are using environmentally controlled chambers programmed to simulate the usual amounts of sunlight, darkness, temperatures and humidity in a typical western North Dakota growing season. The equipment is being used to test the effectiveness of various combinations of spoils, seeds of the native grasses and legumes, and natural and synthetic fertilizers.

Wall emphasized, however, that fertilization is not an acceptable cure-all answer to the complex problem of achieving speedy reclamation.

"We don't buy the theory of using excessive fertilization. Overfertilizing, while resulting in a lush growth for a year or two, may adversely affect the long-term stability and resiliency of these ecosystems," he explained.

In their search for an effective natural fertilizer for spoil materials, Project Reclamation scientists are experimenting with leonardite (slack coal which is useless for heating because it has become naturally oxidized and thus lost its BTU properties) for potential use as a natural soil conditioner.

"All coal actually is plant material, so we're mixing small amounts of leonardite with the top strata of spoil materials to see if it improves the water and infiltration properties of these spoils," Wall explained. He added that, if it works as anticipated, leonardite would be an excellent treatment for the spoil materials because it is composed of natural materials, is quite plentiful and is inexpensive.

Wall is optimistic about the chances of mining North Dakota's lignite without permanently disfiguring the state's countryside.

"I think there's a very good chance we'll be able to reclaim these areas back to their original productivity. However," he cautioned, "it's a myth to think they can be made more productive than they originally were, since we cannot change all the variables, particularly those of climate."

Geology-related Research

The geologists hold a unique position among UND's fossil fuel energy researchers in that their work ranges from regulation of exploratory drilling and actual mining to the gathering of information and subsequent research toward solving land reclamation problems.

UND-based geologists conducted many of the ground tests at the PEAR Project field work site and are active in ongoing research on North Dakota's subsurface geology. They also are involved in geologic mapping and supervising development of the state's oil fields.

Dr. Ned Noble, chairman of the UND geology department and the state geologist, said oil exploration in North Dakota increased during 1975, with a variety of U.S. and Canadian oil companies now conducting drilling operations throughout the western part of the state.

There currently are 130 producing oil fields in North Dakota; 1,971 wells which still are capable of producing; and six new fields identified during the past year. To date, there have been 5,734 wells drilled throughout the state, with depths ranging from 2,000 to 15,000 feet.



PROJECT LIGNITE Principal Investigator Dr. Donald Severson (left) and Project Manager Max Souby examine the quality of newly-processed solvent refined lignite at the on-campus process facility.

The North Dakota Geological Survey, headquartered on the UND campus, regulates for the state's Industrial Commission all oil, gas and coal exploration in the state. The Survey issues permits for all oil and coal drilling and sends staff field inspectors out to supervise exploration work, with a primary interest in assuring the safety of subsurface water-bearing formations. Such formations could become polluted through improper drilling or production practices.

In addition to their work with oil and coal resources, UND's geologists have joined the ranks of scientists seeking to develop energy sources which will offer more lasting availability.

Noble recently supervised a project involving the identification and description of potential uranium host rocks in the western

Wind Energy Studies

While the University's geologists and other scientists are aiding in the search for various energy sources beneath the earth's surface, Prof. Jack Krueger has lifted his face to the plentiful and gusty North Dakota prairie winds and become fascinated with them as a limitless source of energy.

Krueger, a UND electrical engineering faculty member, began developing his wind electric generator in 1970 and has been monitoring its performance and using the generated power in his home since March 1974, when he completed its construction.

The generating unit, comprised of a 10-foot wood propeller, a three kilowatt generator and a turntable, sits atop a 40-foot tower on his property, located near Manvel, N.D. In the adjacent UND high voltage

the winter, providing about five or six per cent of the power needed to heat an average size home during an average North Dakota winter. During the summer the power is rechanneled to help operate his home water heater.

Since the propeller-driven unit's large size would present a major drawback for urban residents, Krueger's latest invention is a more compact turbine-driven wind electric generator, which he has constructed and plans to erect this spring on a 50-foot tower to be placed near his propeller-drive unit, for comparative studies.

Krueger readily acknowledges that wind power cannot be a primary source of energy because it is too sporadic.

"However, wind certainly is a viable source of supplemental energy. It's possible



PROJECT RECLAMATION researchers Dr. Mohan Wall (right), principal investigator, and Alden Kollman, project manager, examine some of the native wild grasses being grown in on-campus climatized laboratory growth chambers.

and southwestern parts of the state and some adjacent areas in South Dakota. The project, conducted jointly by several UND geology professors, was funded by a grant from a branch of ERDA which anticipates a great potential future uranium shortage as Americans turn to increased use of nuclear energy, for which uranium is essential.

The geologists combined field work, library research and information from their personal research files and those of the Survey to arrive at a kind of consultant's-type study, which recently was published as a series of three reports. The information is available for use as a basic reference guide by the government or any company interested in conducting future uranium exploration in the state.

facility building, Krueger has equipment which records voltage, current and wind velocity.

His detailed records show that winds of eight to 10 miles per hour are needed to get the propeller started; and that an optimum output of three kw's is generated by winds of about 40 mph.

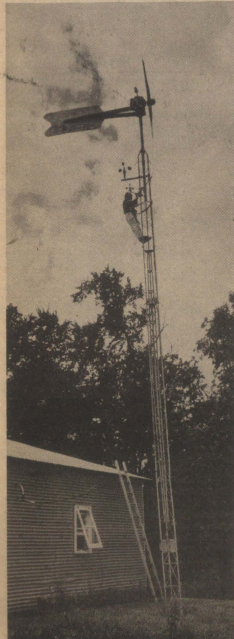
On a typical windy North Dakota day, Krueger has recorded wind velocities averaging 15 mph over a 24-hour period, with a total of four kw hours generated by the unit. The highest documented output was 10 kw's, at a time when wind gusts reached 94 mph. Krueger said the annual output of approximately 568 kw's is equal to about 100 gallons of fuel oil.

Energy generated by the unit helps power electric heaters in his home during

to get about one-quarter of the energy needed to heat a house from the wind... and the concept now is developed to the point where it is a practical alternative," he said.

Energy—whether it originates from fossil fuels, nuclear power or the wind—is a commodity upon which modern society has come to rely heavily. And, in the coming years of ever-windling fossil fuel stores, man may have to develop and use available energy sources as fully and efficiently as possible.

Power sources that may seem unrealistic, too troublesome or too expensive today could become essential to generate sufficient energy supplies for future generations. It is those years ahead that UND's scientists are looking toward in their research today.



PROF. JACK KRUEGER does some repair work on his wind electric generator.

JERRY OLSON

JERRY OLSON

JERRY OLSON

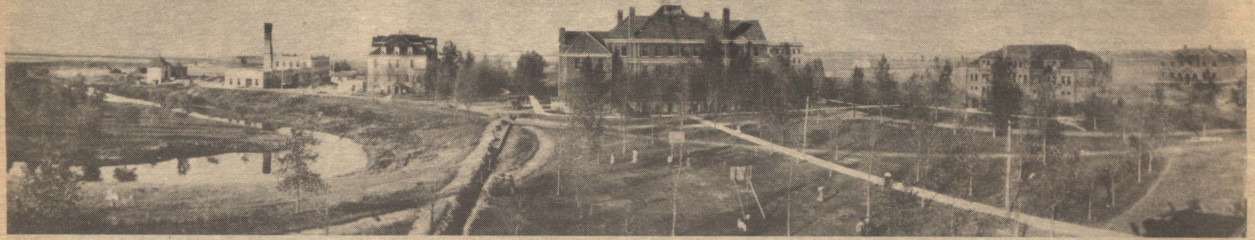
CHANDLER

DAVIS

OLD MAIN

BUDGE

BABCOCK



THE CAMPUS IN 1909 consisted of five main buildings. This photo was taken from directly south of the campus.

During the Merrifield era

Expansion in University programs, facilities

This is the fifth in a series of Bicentennial articles about the history of the University of North Dakota. The series is based upon Louis Geiger's book, "University of the Northern Plains," and upon information in the files of the University Archives.

By DAVE VORLAND

Of all the founding fathers of the University of North Dakota, Webster Merrifield had the greatest impact. His accomplishments were recognized at the time (he received the University's first honorary degree in 1909), and his reputation has not been diminished with the years.

Born in 1857 in Vermont, Merrifield was graduated from Yale in 1877, and at the age of 32 was among the first three University of North Dakota faculty members on hand when classes began in 1884. For the next 25 years, 18 of them as president, he was the dominant personality and driving force on campus.

The first half of the Merrifield presidency was in many respects a struggle for survival. The economic disaster that nearly closed the University in 1895 was recounted in the last issue. There were other problems as well.

In 1890, for example, only 570 high school students were enrolled in the entire state. Nearly all of UND's college level students came directly from its own preparatory division. Unwilling to lower the University's standards by admitting unqualified students, Merrifield set about to improve the high school system.

Merrifield took the initiative in 1891 by calling a conference of high school officials. The group selected subcommittees to establish a curriculum and school classification plan, which was instituted on a voluntary basis. Eventually the Legislature made the system mandatory, and began to allocate state funds to properly classified schools.

Merrifield immediately assumed the task of high school examiner in charge of inspecting schools and giving examinations to high school seniors who hoped to enroll at the University. It was not until 1899 that Merrifield or the University received any state compensation for this work. But the result was a growing flow of qualified high school graduates seeking admittance to the University.

Despite Merrifield's conservative attitude regarding student conduct (for example, the brilliant Vilhjalmur Stefansson, later a famous arctic explorer, was expelled for pranksterism and for inciting student unrest), the students admired and respected him.

They sensed that Merrifield, a bachelor until 1902, considered his

students "family." Until the growth of the University made it impossible, he greeted every new student at the railroad depot; and at any given time he had several thousand dollars in personal loans outstanding to students. He maintained a huge correspondence with parents, with graduates, and even with errant former students such as Stefansson.

It was probably Merrifield's attitude toward education more than anything else that earned him the devotion of students. As historian Louis Geiger points out, "Merrifield viewed education as a highly personalized process, less dependent on what was taught than who taught, a system in which the student was shaped mainly by his daily contact with high-minded and cultured men."

Merrifield acted upon this philosophy by selecting faculty who were, above all, great teachers. Professors such as Hannah Davis (English), Joseph Kennedy (education), Melvin Brannon (biology), and Vernon Squires (English), Geiger says, "had qualities of integrity and earnestness, plus an old-fashioned faith in the value of knowledge—for its own sake, which rubbed off on their students and gave them something they cherished for the rest of their lives."

The University's financial picture became better with the turn of the century. In 1901 the Legislature approved a special statewide mill levy to produce a steady flow of income for the University.

Nevertheless, it took some unusual financial dealings by Regent William Budge to permit the rapid physical plant expansion that occurred in the early 1900's. Some of Budge's projects were held to be technically illegal, but, thanks to his political influence, the Legislature always approved them after the fact.

More land was needed for campus expansion. Sixty acres west of the English Coulee were transferred to UND in 1901 by the state, but this land was not immediately developed. Instead, UND expanded east of its original boundary (roughly the middle of the present present mall) through the purchase of two 20-acre plots from Budge, whose real estate firm had donated the original 20-acre campus.

The first of these acquisitions from Budge was made possible by Merrifield himself, who bought the land for \$4,000 and donated it to the University. Merrifield always was generous with his money and his wife's wealth, when it came to the University. Among other things, he formed a street car company to connect the campus with the town; loaned money for construction of a president's residence, later known as Oxford House; and provided furnishings for the library building donated by Andrew Carnegie.

Altogether, seven new buildings went up during the first decade of the 20th century. Extensive refurbishment of older structures also took place, together with the first planned landscaping. A graveled University Avenue, a continuous board sidewalk from town, and the new trolley eased transportation problems and led to the beginning of residential development in the campus area.

The days of UND as just a liberal arts college with normal

and preparatory departments were drawing to a close. The law school was opened in 1899, and was the first step in a reorganization of the University. Three new colleges, with deans, were designated in 1901: Liberal Arts, Mining and Engineering (at first operated as two schools), and the Normal College. In 1905 the School of Medicine was established, and became the first UND college to receive national accreditation.

Considerable growth took place. The faculty grew from 17 persons teaching in 12 departments or programs in 1898, to 51 persons teaching in 25 departments or programs in 1908. College level enrollment during that period grew from just over 100 to in excess of 400.

Other highlights during the Merrifield presidency included the first publication of Earle J. Babcock's lignite research in 1891; establishment of a UND band in 1893; playing of the first football game in 1894 (uncharacteristically, UND lost to the agricultural college); holding of the first summer session in 1895; awarding of the first master's degree in 1895; employment of a fulltime librarian in 1904; first observance of Founders Day in 1904; and publication of the first *Dacotah Annual* in 1904.

Also, affiliation with Wesley College in 1906; establishment of the University Council, still UND's main governing body, in 1906; establishment of the Public Health



Webster Merrifield

Laboratory in 1907; establishment of a local alumni group in Devils Lake in 1907 (the UND Alumni Association itself dates back to 1889); adoption of letter grades (A-F) in 1908; and awarding of the first Ph.D. in 1908.

The final years of the Merrifield administration saw a gradual change. The institution was becoming a multi-purpose university in the modern sense. As the "old guard" faculty retired or moved on, a new type of professor appeared—the Ph.D. specialist.

Geiger described the transition this way:

"This new type of professor introduced to the University a specialized and professional approach to scholarship and a concern for scholarly reputation in professional societies as well as for teaching reputation among undergraduates.

"It meant some shifting in teaching methods, influenced also by larger classes, from textbook recitation to lectures and self-education in the library and laboratory, these in turn accompanied by less faculty policing of student's study. It meant the arrival of the seminar and the beginnings of graduate study in the true sense. And, finally, it meant an expanding conception of the University's function as an instrument of direct service to the state."

Merrifield announced as early as 1907 that he wished to retire, but was convinced to stay on until 1909. Honors were heaped upon him, including an honorary L.L.D. degree. He and his wife moved to California, returning to campus for the last time at commencement in 1915. He died on Jan. 22, 1916.

A memorial convocation was held at the University, and, as Geiger records, "Newspapers throughout the state paid tribute to the man who had won his place as the University's greatest hero."

NEXT MONTH: The McVey Years.

News Notes / Alumni of the 1960's

Dr. Larry Scouton, '69, a dental surgeon, has opened an office in Minot, N.D. He previously was a U.S. Army dentist, stationed at Ft. Leavenworth, Kan.

Larry Atkins, '66, is a marketing supervisor for Aetna Life and Casualty and recently was elected president of the North Dakota Business Foundation. He lives in Fargo, N.D.

Gretchen Syfert (Adams, '67), now is coordinator of the clinical program for the department of audiology and speech at Gallaudet College, Washington, D.C. Gallaudet is the world's only accredited liberal arts college for the deaf.

Richard Hangsleben, '69, is controller/assistant administrator at Uintah County Hospital, Verbal, Utah. His wife Karin (Larson, '71) is the midwife at Uintah County Hospital.

Christopher Svare, '68, has joined International Multifoods of Minneapolis, Minn., as manager of employee communications and functions, including publication of the employee newspaper.

Dr. Robert Botts, '67, a specialist in emergency medicine, lives in North Attleboro, Mass. He is part owner of the first non-hospital-based emergency room in the Northeast, opened last June, and is a fellow of the American College of Emergency Physicians.

Clifford "Kip" Cranna, Jr., '69, is working toward a doctorate degree in musicology at Leland Stanford, Jr., University, Palo Alto, Calif. His parents are Clifford Cranna, '30, and Anna Cranna (Paulson, '29), who live in Devils Lake, N.D.

Lloyd Holy, '63, has purchased the Gorder and Torgeson Implement Co., Grafton, N.D., and taken over as manager. The firm, being renamed Grafton Equipment Co., will continue to be a John Deere agricultural and consumer products dealership.

William Neumann, '65, has been elected to a three-year term on the Northwest division advisory council of the American National Red Cross. He will represent local Red Cross chapters located throughout North Dakota.



Lt. Col. Hubert Spabrery, '67, a U.S. Air Force officer, currently is assigned to U-Tapao Royal Thai Air Force Base, Thailand, where he is serving as commander of the 635 Security Police Squadron. His wife is the former Susan Villings, ex '74.

Roger Breezley, '66, is vice president for administration of Moduline International, Inc., Chehalis, Wash., a multi-plant factory-built housing firm. He lives in Olympia, Wash.

Stanley Johannes, '66, '70, is a fish manager for the Department of Natural Resources. He and his wife Mary Jean (Penwarden, ex '62) and family live in Spooner, Wis.

Curtis Brekke, ex '63, now is the city planner-coordinator for Hazen, N.D. He previously worked for the city of Grand Forks, N.D., in a planning capacity.

Richard Crockett, '66, has been named financial officer for the Tri-College University, Fargo, N.D., and Moorhead, Minn. He also is legal advisor to North Dakota State University, Fargo. His wife is the former Susan Anderson, '66.

Mary Ann Christman, '66, is employed at San Jose, Calif., State University as a clinic coordinator and instructor at the speech and hearing center. Last November she reported the results of her study on memory tasks at the American Speech and Hearing Association convention.

Larry Jones, '68, has gone into partnership with a Stanley, N.D., certified public accountant to form the CPA firm of Mell and Jones in Stanley. During the summers, he also operates a farm south of Blaisdell, N.D.

G. Keith Brooks, ex '62, recently was elected district governor for the North Dakota Funeral Directors Association, which serves the northeast quarter of the state. He is associated with the Brooks Funeral Home, Langdon, N.D.

Doris Onstad, '61, is teaching an in-service class on "the language-experience approach to reading" in the Grand Forks, N.D. public school system. She will be conducting similar sessions at an upcoming state teachers convention in Fargo, N.D.

Malcolm Brown, '67, is a partner in the Mandan, N.D., law firm of Bair, Brown and Kautzmann. His wife Carol (Lovegren, '61), recently was elected to the boards of directors of both the Mandan Hospital Association and the Heartview Foundation.

Remember when . . .

March 1926—Reserve members of the Dakota Playmakers presented the five-act comedy "She Sloops to Conquer" for their first performance of the year. Coached by Mrs. E. D. Schonberger, the cast included William Seitz, Mary Barnes, Jack Austin, Henry Haussamen, Aileen Thacker, Cecil Joyce, Frank Martz, Winfield Smart, Newton Fawcett and Charles Buchanan.

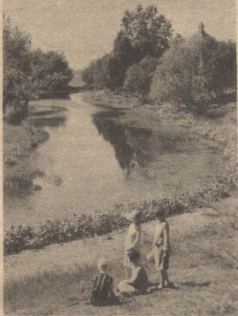
March 1926—UND's first intramural hockey season closed with the championship undecided. Sigma Alpha Epsilon, of the North Star league, and Sigma Chi, the Ice King league representative, were tied for first place but were unable to play the final game because of warm weather. Members of the North Star league included Harry Turner, R. Calvin Lindquist, M. Earl Wambach, Roy Tompkins and Robert Hallenberg. Ice King league members were Harold Hannah, Donald Dryden, James Power, William Ankenmann, Chester Bridgeman, Carl Haun and John Woolege.

March 1936—University history was made when Elaine Swiggum was appointed business manager of the Dakota Student, marking the first time a woman had held such a position in the Student's 50-year life. Others appointed to positions on the paper were Robert Kunkel, editor; Melvin Ruder, managing editor; Bruce Westley, makeup editor; Winston Olson, sports editor; Mary Muldowney, society editor; Erling Knapp, assistant business manager; and Robert Gunderson, advertising manager.

March 1936—Lambda Chi Alpha fraternity and Delta Zeta sorority took first place in the Flickertail Follies 15-minute act division with their colorful gypsy camp scene. Delta Gamma's "Quintuplets in Rhythmland" received first place

in the 12-minute women's division; and the men's division went to Sigma Alpha Epsilon whose own orchestra played modern dance numbers. Alpha Tau Omega capitalized on campus personalities with their amateur broadcast, "A Bit o' Burlesque," and received first in the six-minute act. "Phew Man Chew," the combined act of Delta Tau Delta and Sigma Chi, was the most original. Two hundred and fifty dancers, singers and comedians performed for a near capacity crowd. Follies directors were John Howard and Joseph Mader; and Robert Kunkel was the student manager.

March 1946—Sigma Alpha Epsilon held the first post-war party when the Fargo S.A.E. chapter visited for a weekend. The new



members enrolled into the fraternity were Frank Nix, Gordon Home, Dick Gallagher, John Burghum, Hubert Cavley, Walt Shjeflo, Kenny Samuelson and Bill Beede, who was elected chapter treasurer.

March 1946—The AmVets, formed by a handful of veterans in the fall of 1944, became a prominent organization on campus, with 700 serious members who believed in their organization and its purpose. Although they considered the social scene secondary, member Louis Bogan managed the March semi-formal ball which established another University tradition. AmVet officers were Kenneth Tvedten, commander; Lloyd Dussell, vice-commander; Jerry Sveen, adjutant; Duane Lund, treasurer; and Reinhold Nathan, head of the standing resolutions committee.

March 1956—The 19th annual Greek Week consisted of various panels, dances, a banquet and interfraternity games. Jim Medaris was general chairman of the organizing committee. Other members included Jean Fenstermacher, panels; Hank Booth, panels; Lois Reiquam, president of Panhellenic Council; Gary Pearson, Interfraternity Council president; Barbara Bechtel, decorations; Dave Dickson, basketball; Joy Wardner, banquet; Rod Hermes, dance; Jean Jacobson, faculty exchange; and Duane Flaa, publicity.

March 1956—Fifteen seniors were chosen by an anonymous 10-member student/faculty panel for the Who's Who contest, sponsored by the Dakota Student. Students were picked on the basis of their membership in organizations, offices held, scholarships awarded and participation in extra activities. Those selected were Bruce Beard, Warner Brand, Carol Christensen, Charles Fisher, Calvin Hallada, Wendell Hanson, Elaine Kval, John Risan, Eugene Sailer, James Saur, Dianne Smith, Thomas Sullivan, Karl Swenson, John Wilson and Gail Wicks.

March 1966—Students elected to the Board of Governors included Marsha Howard, fine arts; Maxine Monkman, forum; Ron Keller, public relations; Jane Jacobi, secretary; Mary Dee Benesh, special activities; Larry Koles, governor of recreation and senate representative; Sharon Zimmerman, house; Mike Bender, chairman; Peg Will, treasurer; and William Hill, entertainment.

March 1966—Sioux basketball team members placed fourth at the NCAA national tournament, held in Evansville, Ind. On hand to root for the team were cheerleaders Ruth Brekke, Muriel Carlstad, Joan Meyers, Bunny Carlson and Jeanne Knoff.



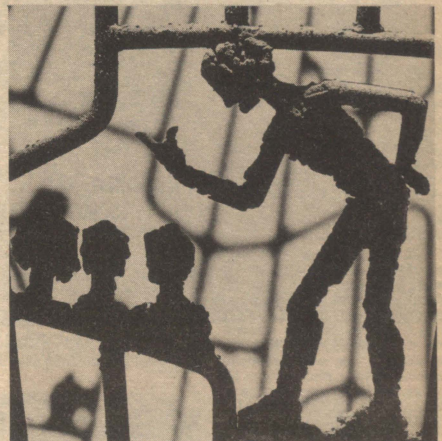
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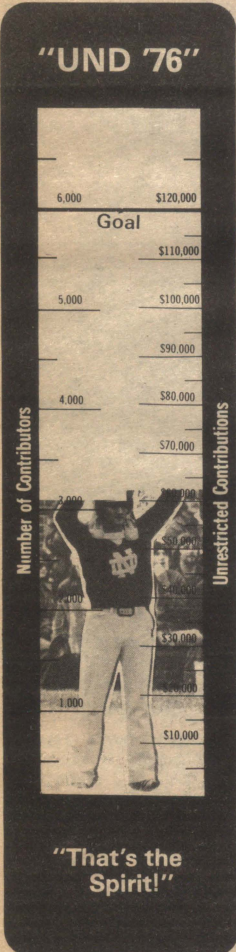
If I decide to attend, my group will include:

Single _____ Couple _____
 Children (please list age and number) _____ (1-5)
 _____ (6-11)
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_____ Please send information on Rube Bjorkman's annual boy's hockey clinic. (Cost is supplemental to basic Alumni University fees.)

UND Alumni Association
 P.O. Box 8157 University Station
 Grand Forks, ND 58202

NAME _____
 ADDRESS _____
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As of Feb. 20, 1976, the 1975-76 Development Fund had received \$62,210.84 in unrestricted gifts, toward its goal of \$120,000. Total gifts received amount to \$102,831.19. These gifts include contributions from 3,132 alumni and friends.

"That's the Spirit!"

Dr. William Cornatzner

He's devoted 25 years to the Medical School

By MARY ANN MEIDINGER

The goal for excellence in biochemistry has been the lifeblood of the University of North Dakota School of Medicine's biochemistry department since 1951. That's when the department was created and when Dr. William E. Cornatzner took charge.

"I came to North Dakota from North Carolina for an interview during a blizzard in March, 1951," he recalls. "I had to land at Fargo and couldn't even get up to Grand Forks except by train. I couldn't get out of here either for three days but finally caught a train to Chicago."

Such an abrupt exposure to the blustery elements of a North Dakota winter might have turned many a warm-blooded southerner away, but not young Dr. Cornatzner.

The idea of coming up to North Dakota to set up a biochemistry department—and the friendliness of the people he met in the state—sparked his energies and he accepted the position. The School of Medicine has continued to benefit from his decision over the spanning 25 years.

Dr. Cornatzner, who holds the impressive titles of professor, chairman of the department of biochemistry and director of the Ireland Cancer Research Laboratory, has been an influential figure in the growth of the biochemistry department and also of the School of Medicine as a whole.

He organized his department literally from scratch, assembling equipment, chemicals and an original staff of two. The state gave him adequate funds for setting up a laboratory to teach medical students and he also immediately started a graduate program that first year.

Since then, the department's staff has awarded 61 masters and 41 Ph.D. degrees in biochemistry, has taught hundreds of biochemistry undergraduates and medical students and has fostered a continuous dedication to excellence in teaching, research and service.

During his years with the school, Dr. Cornatzner has taught almost every one of the alumni, who number well over 1,000.

"We've had some very brilliant medical and graduate students," he said. "I think the students keep you young and, in teaching, they're your living memorial. We always are stimulated by them."

The biochemistry department teaches the largest number of graduate courses each semester in the medical school and currently has 14 graduate students.

"Graduate students maintain the life of a basic science department," Dr. Cornatzner said. "They have freedom of input, change and gathering new data. They can go off on a tangent and delve further into certain areas."

The biochemistry staff has published 246 full-length papers (co-authored by medical and graduate students) since 1951. Dr. Cornatzner alone has published 126 full-length research papers and 74 abstracts during his professional career.

The staff as a whole also has brought \$3.2 million in research grants in biochemistry to the School of Medicine. Dr. Cornatzner is responsible for \$1.5 million of those grants, plus \$640,131 in fellowships and professorships.

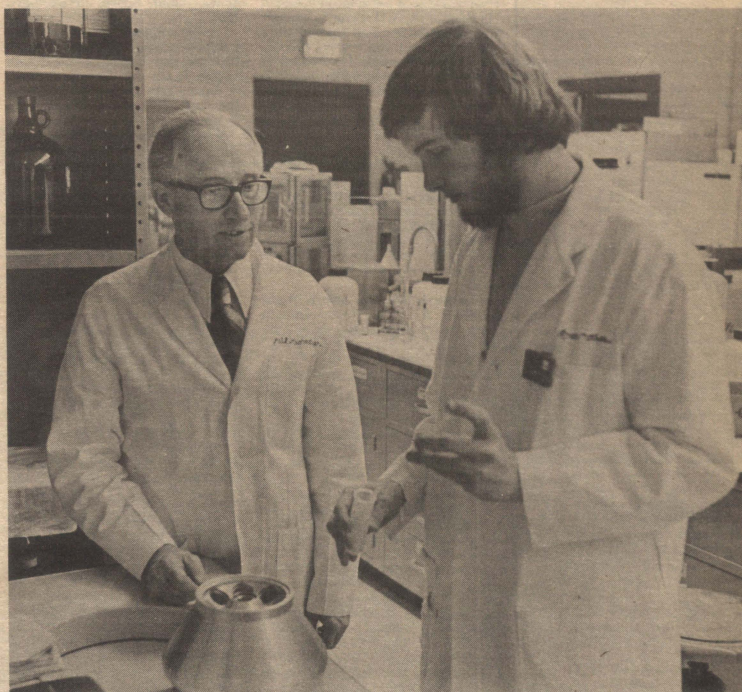
He also has brought widespread attention to the UND School of Medicine through his efforts in establishing the Ireland Cancer Research Laboratory and the Human Nutrition Laboratory.

The Ireland Laboratory was begun shortly after Dr. Cornatzner joined the school. Its prime objective is the investigation of the basic science aspect of cellular growth and development.

A \$10,000 bequest by the late Guy L. Ireland, Grand Forks businessman, initiated the lab and successive contributions by Mrs. Ireland and funds awarded by the National Institutes of Health, North Dakota State Medical Center and National Cancer Institute helped the laboratory grow.

"We started with one room of equipment, spread to one floor and then to six floors," Dr. Cornatzner said. "With the laboratory we were able to build outstanding facilities. All of our equipment has come out of research grants."

It is in the Ireland Laboratory that Dr. Cornatzner does his noted research in phospholipids and



DR. CORNATZNER watches as biochemistry graduate student Eric Uthus prepares to put cells in a laboratory centrifuge.

membranes — finding out what happens in the development of fatty livers, how we develop a fatty liver in liver disease and how lipids change in cancer.

He and his students have discovered that a virus which causes cancer stimulates an enzyme that synthesizes phospholipids in the membranes of the cell.

Although Dr. Cornatzner states that scientists are far from finding a cure for cancer, he feels major advances in the future will come in the area of the immune response to cancer.

"If we can find how the human body either loses its immunity to the cancer cell or make a normal cell fight the cancer cell through an immune response, we could destroy it that way like the antibodies we use to treat polio.

"When we have a cancer growing, that cancer cell loses its immunity and starts spreading over the entire body. If we could find what biochemical changes occur there, we may be able to stimulate the normal cell to fight this cancer cell."

He also cites the possibility of isolating the viruses that cause human cancer and treating the disease on that basis.

"Most of the experimental models of cancer in the lab are due either to chemicals or to viruses. We have a number of chemicals and viruses that can be injected into an animal or plant and cancer always will be produced."

He further explained that cancer of the breast in the experimental animal is due to a virus.

"The virus is transmitted in the milk of the mother mouse and every female mouse that nurses from that mother comes down 100 percent with cancer of the breast within a few months," Dr. Cornatzner said.

He added that a high incidence of breast cancer is hereditary, "but whether it's a virus transmitted somewhere, I don't know," he said.

"We do know viruses can go inside the cell and stay there. When the cell is exposed to radiation or stress, the virus breaks out, starts duplicating itself and causes malignancy."

Other research activities at the Ireland Laboratory, in addition to Dr. Cornatzner's are being performed by his seven staff members and by other members of various

departments at the School of Medicine. Also, the Human Nutrition Laboratory, U.S.D.A., is a center of experiments and research in nutrition.

During the initial planning for a nutrition research center in the United States, Dr. Cornatzner appeared twice before the United States Senate on behalf of establishing an expanded program in human nutrition.

In addition to listing all the areas of nutrition that needed to be explored, he emphasized that high medical costs could be cut down if the health of human beings were maintained by proper nutrition and diet. He also stressed the laboratory should be associated with a university in order to benefit from the vitality graduate students would put in the program.

One area of intensive research at the nutrition laboratory is that done with trace minerals—those minerals such as zinc, copper, cobalt and chromium, which are required in minute amounts for human and animal nutrition.

"They are studying how these minerals work at the molecular level and which enzyme or protein they are part of," Dr. Cornatzner explained.

"The scientists are investigating how these minerals are absorbed from the gastrointestinal tract and their physiological role in the cell. Our knowledge of trace minerals is analogous to what we knew 25 years ago about vitamins."

Dr. Cornatzner's contributions to scientific research and to the UND School of Medicine have not gone unacknowledged.

At the University he has received the Golden Apple Award for excellence in teaching medical students (presented by the Student American Medical Association and a toast to the rapport he establishes with his students), the Sigma Xi Faculty Award for outstanding scientific research and also has been made a Chester Fritz Distinguished Professor.

He has been honored with several science and research travel awards to present papers at national and international conferences. He became an honorary citizen of Pino-Farmington, N.C., in 1975. The award was given to him in appreciation of services rendered to humanity in the field of medicine.

Dr. Cornatzner is a native of Mocksville, N.C., and holds a B.S. degree from Wake Forest Univer-

sity, Winston-Salem, N.C.; M.S. and Ph.D. degrees from the University of North Carolina, Chapel Hill; and an M.D. degree from Bowman Gray School of Medicine, Winston-Salem.

In 1970 the University of North Carolina School of Medicine faculty selected him for their Distinguished Service Award, a recognition comparable to UND's Sioux Award.

"It's an honor I really cherish," he commented.

His membership in a host of professional organizations includes the American Chemical Society, American Society of Biological Chemists, American Board of Clinical Chemistry, and Alpha Omega Alpha.

He is a Fellow of the New York Academy of Science, the American College of Physicians, the American Institute of Chemists and the American Association for the Advancement of Science.

He also has put many hours of his time into serving on committees for the development of a four-year, degree-granting medical school and is looking forward to graduating the first class this spring.

"The program will enormously improve health care delivery in the state," Dr. Cornatzner said.

"By graduating our students here—after training them with an emphasis in primary health care—we should be able to keep more doctors in the state. They then may choose to practice in the rural areas where physician shortage is so great."

Dr. Cornatzner's pride in his biochemistry graduates prevails as he cites the various places across the country where they are now employed—for example, University of California, Cornell, Washington State, Louisiana State, National Cancer Institute, National Heart Institute, industrial posts and some who have gone on to earn M.D. degrees.

"I write to all our graduate students after they have left and we also have an alumni meeting every year in conjunction with the national Biochemistry Society meeting.

"We also put together a newsletter for alumni to tell them about the department and the school. And, if the students come back to the University, they come to see me."

That in itself, perhaps, says the most about Dr. Cornatzner's success.



LADY BIRD JOHNSON, widow of former President Lyndon B. Johnson, made her world stage debut February 5 at UND's Chester Fritz Auditorium when she appeared with the Winnipeg Symphony Orchestra in "A Canadian Salute to America's Bicentennial." In conjunction with the symphony's performance of music by great American composers, Mrs. Johnson read excerpts from the Declaration of Independence and a selection from "The Great Society." She also narrated "Lincoln Portrait" and "New England Triptych." The program, marking the Winnipeg Symphony's eleventh appearance at UND, was described as a "warm and gracious . . . salute to our Bicentennial" by Mrs. Johnson, who is a member of the Advisory Council to the American Revolution Bicentennial Administration. Above, she is shown at a press conference prior to the program. Following her University appearance, she and the symphony traveled to Winnipeg for two performances there.

