

**MISSOURI
ALUMNUS**

NEWS FROM THE DIVISIONS

SEPTEMBER-OCTOBER 1972



OBSERVATORY/3

agriculture

No More Ice Cream Cones

No longer can you walk over to the dairy and buy a huge ice cream cone on a sizzling spring day. The dairy processing plant closed July 1.

The College of Agriculture has cut back its operations mainly in research and extension by \$313,000 to meet University budget cut requirements, Associate Dean Richard Aldrich says.

Several programs will be phased out or modified in the next two years. The milk plant was the first to go.

The spectographic analysis program, responsible for recent discoveries of mercury contamination in various golf course lakes, was transferred to the University-wide Trace Substances Center.

The Weldon Springs center will discontinue general farm operations in December. Research will also be scaled down there.

The cuts mean a \$60,000 cut in the Agricultural Research Operations Unit, which services research from several departments. Programs that were cut were selected by the College of Agriculture administration.

The cutback followed an announcement by University President C. Brice Ratchford that the University would have to reduce spending for the fiscal year by \$4.5 million.

Cutbacks were made necessary, says Ratchford, after the Legislature reduced appropriations.

Scholarship Interviews Planned

The College of Agriculture schedules scholarship interviews to visit personally with those academically eligible students who are interested in attending the College. These interviews have proved very valuable, Ralph Rogers, assistant to the dean, says, in that the scholarship committee gets to meet each student personally and learn about him in addition to seeing his or her academic record.

During the Fall of 1972, scholarship

interviews are scheduled at the following centers: Oct. 27, Delta Center; Nov. 2, University of Missouri-Columbia; Nov. 10, Southwest Center; Dec. 1, North Missouri Center; Dec. 8, Elmslie Highland (Morman Research Farm located between Taylor and LaGrange, Mo.).

Interviews start at 9 a.m. and generally conclude early in the afternoon. Students in the top 15 percent of their class who desire to be interviewed should contact the Agriculture Dean's Office at 2-64 Agriculture.

Alumni are encouraged to call these

interviews to the attention of deserving students and to recommend such students for interviews, Rogers says.

Aggies Plan Pre-Game Lunch

The annual fall pre-game buffet luncheon in the corridors of the Ag Building will be Sept. 30. This event, from 11:00 a.m. until 12:30 p.m. will follow the board meeting of the Ag Alumni Association district directors and will precede the California-Missouri football game.

As usual no program is given at the luncheon. In the past, about 200 Aggies and their friends or family have

Lovely Weather For Le Duc



Surrounded by charts, computer printouts and programs of her research in weather prediction is Dr. Sharon LeDuc. She works with Dr. James McQuigg, (right) professor of atmospheric science, on how weather predictions may be used in building and road construction, influenza epidemics, corn growth and electric power loads.

"Do you think it's going to rain?" is more than a conversational question with Dr. Sharon Kay LeDuc.

She works with weather probabilities, and that work brought her a recent nomination for the recognition award for young scholars, a new award of the American Association of University Women (AAUW).

A research specialist in the department of atmospheric science, she is concerned with such problems as weather influences in construction of roads and buildings, in corn growth and influenza epidemics and on electric power loads.

She analyzes and defines the weather effects in these problems in mathematical terms. One form of definition is the "probability model," giving predictions using actual or simulated weather conditions on the computer.

"What we would like to do is develop prediction 'probability models' so simple that a construction foreman could figure out each morning from available information--right at his desk calculator--what the day's weather could be and how large a crew to call out," she says. She has been working on the project since

1971 with Dr. James McQuigg, professor of atmospheric science.

She and McQuigg have begun a study of temperature patterns and power needs, with the possibility of preventing power blackouts and brownouts through predictions and interconnected systems for power.

Her study with corn, determining the accuracy of "growing degree days" for new corn strains, is with Dr. Marcus Zuber, professor of agronomy. The study of effects of weather on influenza epidemics and on the virus itself--in a field called bio-meteorology--is with Dr. Howard Hopps, Curators professor of pathology.

Both Dr. LeDuc and her husband, Richard, can take their work home with them. He is manager of computer programming at the Cancer Research Center. The LeDucs have their own portable terminal. Much like a typewriter, it links to a computer through a regular telephone, and uses a regular television set for a visual image of problems.

Richard and Sharon met in their first college mathematics class. They continued to be classroom competitors, she says, even when they came to Campus for their graduate work.

The LeDuc children, Brian, 4, and Philip, 2, were both born during intersessions between Sharon's college classes. This has brought some comments among her colleagues about her skill in prediction.

Dr. LeDuc is one of several young women scholars on Campus--all under 35--considered by a Campus committee for the AAUW nomination. Committee chairman was Merea Williams, associate professor of education and Campus corporate liaison representative to the AAUW.

Nominations for the award were made across the country by educational institutions which are corporate members of AAUW. Nominees were required to demonstrate "great potential for achievement" in a field related to one of four current study and action topics of AAUW. Dr. LeDuc's work was in the category of "This Beleaguered Earth," a topic concerned with environment.

attended the luncheon. The meal this year will cost \$2.

"Firm reservations are not required but to estimate how much food to prepare we need to give the students serving the meal some indication of attendance," Ralph Rogers, assistant to the dean, says. "If you do plan to eat with the Ag Alumni, and we hope you do, please notify me, Executive Secretary of the Ag Alumni Association, 2-69 Agriculture Bldg. and state the number of reservations you want."

Ag Day 1973 will be Feb. 2 in the new Livestock Center. The day's events are sponsored by the Ag Alumni Association.

Committee Asks For Nominations

On the Awards Committee of the Ag Alumni Association are John Brown, 8133 Delmar, St. Louis, Mo. 63130; Ralph Schaller, Courthouse, Butler, Mo. 64730; and Alan King, Dadeville, Mo. 65635. This committee will be presenting its recommendations to the Ag Alumni Board Saturday, Sept. 30. Nominations for persons to receive the Alumni Citation of Merit Award or Honorary Membership in the Ag Alumni Association should be sent to one of these men before Sept. 29.

Nominations should be accompanied by a statement of the nominee's accomplishments and achievements so the committee will have this information to use in arriving at its recommendations to the board.

Cattle, Poultry Can Feed On Beer Brewers' Waste Products

Research may help beer brewers get environmentalists off their backs by selling used brewing grains as cattle and poultry feeds.

"Brewing companies were forced to become concerned with their waste products in light of demands by ecologists," says G.B. Thompson, professor of animal husbandry.

Several grants from Anheuser-Busch Inc. have funded research into the energy and protein values of brewers' grains in cattle and poultry feeds.

"The results are interesting because brewers' grains are higher in proteins and energy than indicated in a report by the National Research Council," Thompson said. "Our research shows these grains do provide bulk roughage, high energy value and protein necessary in feeds."

At present 108 steers are being tested on brewers' grains at University farms.

Coop Leaders Attend Institute

Domination of agriculture by corporate business has forced rural Americans to migrate to increasingly congested cities, James Hightower, director of the Agribusiness Accountability Project, told the Graduate Institute for Cooperative Leadership.

Hightower is the author of "Hard

Tomatoes, Hard Times," a book critical of the role of land grant colleges and universities in agribusiness.

Noting that social movements are now organizing politically and economically, Hightower said farmers and farm workers are no longer depending on the government "to do what is right," but establishing power to shape rural America.

The Graduate Institute of Cooperative Leadership, before which Hightower spoke, was organized to facilitate a philosophy of cooperation among leaders of the business community.

Dean Elmer R. Kiehl of the College of Agriculture served as chairman of the Institute held in July. Cooperative organizations across the country were invited to send their top managers to the institute, Kiehl said.

arts and science

A Look at the Stars

Although smoke and city lights limit its use for research, the observatory is popular with students and townspeople who come to stargaze on Friday nights.

The observatory is in use by classes four nights a week during the school year; on Fridays it is open to the public. As many as 75 people come out to hear Dr. Terry Edwards talk informally about what is visible through the telescope.

Edwards describes himself as a "computer" astronomer, not an "observation astronomer, but it was he who started the weekly observation sessions for the public in 1968. He was motivated by the belief that "the University ought to support more astronomy than it does."

Only Edwards and Dr. Ronnie C. Barnes teach astronomy. Course listings, though separate, are under the department of physics.

The first PhD in five years or so, according to Edwards, was awarded in May to Tom Harrison. He has taken a job as assistant professor of physics at North Texas State, Denton. His

dissertation was in the area of nuclear astrophysics and concerned element building in stars.

New York Exhibit Shows Press's Excellent Designs

"Designs for Excellence," an exhibition of award-winning books published by the University of Missouri Press, opened at the New York headquarters of the American Institute of Graphic Arts in June.

The exhibit was composed of 17 books published by the Press in recent years that have been recognized by a total of 34 awards for graphic excellence, book design, or editorial contribution, Thomas Lloyd, University Press director, says.

The Missouri Press exhibit was the first in a new series of exhibits by the nation's university presses to be mounted at AIGA, and was staged by the Press in response to a joint invitation by the graphic arts group and by the Association of American University Presses.

It's Greek to the Public

This fall, the classics department will offer a six-lesson course on early Greek civilization at the Daniel Boone Public Library.

The course is one of the more public indicators of an extensive revamping of the classics curriculum that has been going on for more than a year. The classics department has been trying to discover ways to make its field, in the words of a department pamphlet, "relevant to the lives of our undergraduates as educated human beings." Some courses have been dropped and others added; a new major in classical civilization has been introduced; and instead of being asked to concentrate on increasingly specialized topics, students are encouraged to develop broader and more interdisciplinary interests.

The quest for relevance is perhaps more necessary in classics than in many other disciplines, for, as Charles Saylor, an associate professor in the department admits, the usefulness of classics is not very obvious.

However, there are some problems that recur in every society, Saylor says. Thus the Romans, he says, were very similar to Americans since everything in their time was "geared to what you can make a buck out of."

There are even greater similarities between Athens during the Peloponnesian war and America today, Ted Tarkow, another classicist in the department, adds.

"There are many parallels with Vietnam," Tarkow said.

One of the dangers of historical analogies, he says, is that they can be applied too mechanically and thus oversimplify a situation. Knowledge of these early societies, he says, will

GEOGRAPHY---ACADEMIA'S QUEEN

Long before ecology became a catchword, geographers defined their area of study as "man in relation to his environment." Now geography, suddenly fashionable, is coming into its own.

Coloring countries on a map pink, yellow and green, memorizing the capitals of all the states, reciting the principal products of Argentina and searching for the Volga used to bore grade school children. But that kind of approach is as outdated as the hickory stick. Colleges and universities are not only training teachers in a new approach, they are finding that undergraduates with interests in many fields are intrigued by today's geography.

Geographers are concentrating on the order and regularity they find in the patterns, structures, arrangements, and relationships of man's work on the face of the earth — spatial distributions and interactions. They talk about the flight of people to suburbia, how long it takes lettuce to get to your supermarket and how a farmer in Montana learns about a new hybrid developed in Iowa.

At Mizzou a staff of only five men run a sizeable undergraduate program and advise about 25 master's degree candidates. Dr. Jesse Wheeler, the department chairman, is happy about the surge of interest in geography and is revamping the basic course, Regions and Nations of the World, to capitalize on students' current and geographers' long-standing concerns with social issues.

"Busing is a geographical problem," Wheeler comments. The race problem, the urban crisis, the poverty problem, pollution, the energy crisis and natural disasters — all can be considered within the framework of geography, and all will be in the course syllabus this fall.

So interdisciplinary that it has been called the "queen of all the human sciences," geography is per-



haps most of all "a perspective," Wheeler says.

Wheeler taught high school English before World War II. During the war he saw much of the United States, Europe, and the Far East. "I had a lot of time to think about what I wanted to do. English seemed too confining; it didn't offer scope enough. The war awakened people to a big world," he says. "The study of geography stimulates thought as to where things are on the earth, why they are there, how they fit together, and how they might be better ordered to make the world a more desirable place to live.

"Geography aids you in appreciating your home surroundings, helps you derive more benefit from travel, and supplies an essential context for understanding world affairs and many world problems."

In the Middle East, for instance, Wheeler says you need to understand the layout of the countries, the oil fields, the transport routes and the population elements to really understand the problem.

"Geography also enhances the study of history, the social sciences, geology, literature, and all the other subjects to which it is related." This

fall, students in Regions and Nations of the World will consider Canada's national identity, how Canada can stave off becoming "another state" economically and culturally, the problem of unity between its French and English-speaking peoples, and the development of its northern lands.

Wheeler, who attended the 22nd International Geographical Congress in Montreal in August, will bring back to the classroom experiences gained from traveling in Canada and talking with members from 60 nations who are attending the Congress.

"Professionally, geography offers opportunities in teaching, city or community planning and development, cartographic work (map making), intelligence work, and marketing. All in all, a good knowledge of geography makes one more at home in the world he inhabits, and it makes many of the things he sees, hears, and reads much more intelligible," Wheeler says. "When you read Thomas Hardy or the Lake Poets, the setting is important."

Wheeler, drawing on his background in English literature, teaches, at his request, an Honors College course called Historical and Literary Geography of Britain.

Geography began, they say, when Herodotus, a citizen of fifth century Greece, recorded information about the annual floods of the Nile. In today's world, Jesse Wheeler and other geographers look with special insight on the floods that followed in the wake of tropical storm Agnes.

"Let's see," Wheeler mused, "the railroads utilized the flat riverbottom land. The cities grew along the lines of transportation (the rivers and the railroads), and so the floods hit highly populated areas. That is why the loss to people has been so great." Herodotus was interested in the inches of rising water; Wheeler is interested in the social issues. That's what makes a "new geographer." □

enable a student to both appreciate the similarities and the differences between various periods.

The classics department has also begun offering a course called Colloquium in Classical Culture. This course, whose theme will vary from semester to semester, will focus on issues which are controversial today and see how they were treated in classical times. Some of these themes are women, education, ecology, and the generation gap.

"In surveying many ancient attitudes towards women," Tarkow said, "the class came up with the understanding that many things we do to women today are due to what we did to them in the past. It is extremely important to reinterpret a permanent past for a continually changing present."

Many students appear to realize this, Saylor said. Although, the six-man classics department, he says, is one of the smallest in the University, nearly 1,200 students take classics courses every term.

Researcher Studies Genes

"Children are born with genetic defects every day which we may begin to do something about in the next few years," Dr. Richard Wang, says.

The assistant professor of biology has received a grant from the National Science Foundation for \$65,000 to study "Mapping of Genes on Human Chromosomes."

Wang says his work will contribute to the understanding of the genetic apparatus in human cells, knowledge that will eventually lead to viable techniques of "gene therapy."

"It's going to be a long and tedious process that leads to that goal, though. We must take cells from the human body and grow them in dishes or bottles under carefully controlled conditions. We grow these cells with defects or create defects, then try to understand their causes."

Wang is also interested in viral carcinogenesis, cancer from a virus. "With animals, we can isolate cancer viruses, but we can't yet do that with humans, though we're getting closer," he says.

Botany Text Sales Hit 100,000

Dr. Edward M. Palmquist, associate dean of the College of Arts and Science, has received a leather-bound copy of his book, "General Botany," to signify that over 100,000 copies have been sold.

The book has been used in more than 100 schools, although it has not been in use on Campus for about 15 years. Palmquist, himself, relinquished teaching duties to become associate dean about 15 years ago.

He retired on Sept. 1 from the faculty where he has been continuously a staff member since 1942, except for two 18-month terms, the first when he was

"borrowed" by the National Science Foundation in 1954 to serve as program director for education in the sciences and the second to become visiting professor of botany at the University of the Philippines from 1957-59.

Faculty Write About Indians For Handbook By Smithsonian

A number of Campus anthropologists will be among the contributors to a 20-volume Handbook of North American Indians currently being undertaken by the Smithsonian Institute's Center for the Study of Man. Projected publication date is summer 1976.

Professors Robert F. G. Spier and H. Clyde Wilson are writing on the Foothills Yokut and Jicarilla Apache tribes respectively. Instructor Margot P. Liberty is writing on the Cheyenne tribe. W. Raymond Wood, professor, will do two articles on Plains Indians. Associate Professor Richard Krause will also do an article on Plains Indians.

"We also have a talented graduate student, David Madsen, who is writing one article and co-authoring another for this prestigious work. This speaks very well for the quality of graduate students in anthropology here," Wood says.

The handbook will summarize what is known of the anthropology and history of Indians and Eskimos north of Mesoamerica.

It supersedes the old two-volume handbook of American Indians North of Mexico which came out in 1907 and 1910.

"Within the space of some 60 years, the amount of knowledge on the subject mushroomed from two to 20 volumes," Wood notes.

Schizophrenics Language Acts As Interpersonal Barrier

Inappropriate and often bizarre language is used by schizophrenics as a device to avoid intense personal conversations and relationships which would result in inner stress beyond their capacity to endure, concludes a Columbia Campus researcher.

Dr. Algimantas M. Shimkunas of the psychology department, now has concluded a two-year research study of "Schizophrenic Communication and Cognitive Deficit." The research was conducted on a grant from the National Institute of Mental Health of HEW's Health Services and Mental Health Administration. His report was presented recently at the annual conference of the Midwestern Psychological Association in Cleveland May 4-6.

Shimkunas studied 20 recently-hospitalized paranoid and 20 nonparanoid schizophrenic patients and 20 nonpsychotic psychiatric patients. They were asked to relate their experiences concerning eight emotion-laden topics, for example being rejected by people or getting angry.

The schizophrenics were markedly

delusional and autistic in response to a demand that they reveal their personal feelings and experiences on subjects that might involve emotion.

The study indicates that by verbalizing peculiar beliefs and autistic concepts, the schizophrenic is able to avert intense relationships. In short he controls relationships by in effect defining them as nonrelationships (since he and other people lack a common language), without ever taking responsibility for the redefinition (because it is achieved by his bizarre messages, and not by an overt, admitted maneuver).

Professor Writes First Text On Environmental Chemistry

"Chemical problems are going to take chemical solutions," Dr. Stanley Manahan, associate professor of chemistry, maintains.

To better train chemists to play a strong role in dealing with these chemical pollutant problems, Manahan has written a text, "Environmental Chemistry."

The text, the first book of its kind in the country, is designed for college-level courses. It discusses chemical aspects of water, air and soil environments.

Manahan, who has instructed an environmental chemistry course on Campus for graduate students and upper-level undergraduates since 1971, has based his book around that course and on a survey he recently conducted.

The survey revealed that courses of this nature are generally new on most campuses, but definitely on the increase. "My study strongly indicates that environmental chemistry is becoming a major sub-division in the field of chemistry," Manahan says.

He discussed the findings of his study at the Aug. 28 national meeting of the American Chemical Society in New York.

The book, published in July, had been adopted by five institutions of higher learning by Aug. 1.

Professors Combine Art, Music To Create Poetic Documentary

Two artists, two media. Working together they have created a "poetic documentary" film with a soundtrack of electronic music.

The artists are both associate professors, Eric Rutherford, art, and W. Thomas McKenney, music.

People's recreational activities at a large, beautiful lake provide the image. Rutherford says he intends to show the indifference of humans to their own environment and ignorance of their surroundings.

"The music used in the film has been composed so it could be played at a concert and stand by itself," McKenney says. Electronic music, or synthesized music, has been his main interest since 1964.

"I like the anti-romantic quality of the music," Rutherford says, "it helps to

tone down the romantic nature of the film.

"Films usually break down into two types, fantasy and documentary. My film falls in between: it is not a story film nor is it purely image," Rutherford says. He usually works within the paint medium.

"Many painters are into film and film images now, it seems. There is no question that a great film is a great work of art," Rutherford says.

Hall Named Sociology Chairman

Peter M. Hall assumed duties Aug. 1 as professor of sociology and rural sociology and has been recommended for department chairman.

Hall has been associate professor of sociology at York University in Ontario, Canada, since 1969 and previously was assistant professor at Iowa and California (Santa Barbara) universities. He received bachelor and master degrees from the University of California, Berkeley, and took his doctorate in 1963 at the University of Minnesota.

Hall's teaching interests are in political sociology, collective behavior and social movements, sociology of conflict and social psychology. He has been widely published on these subjects, and juvenile delinquency, and currently has under contract with publishers an introductory text book.

business and public administration

ACTION Program to Expand

Initial success has led to hopes of expanding ACTION.

Dean Robert W. Paterson of the School of Business and Public Administration said that the Assistance Clinic to Improve Organizational Needs, organized last winter to help solve problems that might cause business failure, had completed action on 10 of 12 pleas for assistance. The other two are in progress.

Untapped as yet are services available to governmental agencies, although two

cities have made inquiries on such problems as improving downtown marketing and helping to predict success or failure of businesses due possibly to site locations.

"We are prepared to offer distressed businesses, government agencies, and needy individuals in the mid-Missouri area assistance in accountancy, marketing, economics, finance, government and management," Dean Paterson said. "We use outstanding students in the school, many of them graduate students, to work on problems of a management nature--cost and profit analysis, accounting systems, market research, financial analyses, forecasts, and tax analyses--under faculty supervision.

Business Job Market Brightens

Job prospects for graduates of the School of Business and Public Administration are improving, the placement office's annual report indicates.

The report shows that representatives of firms who visited the Campus this year had more jobs to offer than those who were here in previous years.

Beginning salaries also are showing an increase over the 1970-71 averages. The undergraduate yearly salary averages \$9,252 for 1971-72, a 3 percent gain from last year's average earnings.

Minority group employment was found in almost every area. Jobs for women earned equal pay with those for men.

The overall employment picture, if not bright, seems brighter, the report indicates.

POSU Survey Helps Columbia To Determine Cable TV Market

The Public Opinion Survey Unit conducted a survey in June to gather data to help Columbia determine the potential market for a city-owned cable television system.

The survey revealed that about 95 percent of local households have at least one television set; more than 40 percent have color tv; and more than 40 percent have more than one tv.

Many people assume that education is related to tv set ownership, though their expectations differ. Some people assume that more highly educated people, having higher incomes, would be more able to afford color or second sets; while other people assume that more highly educated people would be less likely to watch the "boob tube." In Columbia, the survey found, education makes no difference in the number or kind of sets owned except that better educated people are slightly more likely to own color sets.

The POSU was formed in 1964 to assist faculty researchers and public agencies in securing information needed for the solution of social problems. It is a part of the Business and Public Administration Research Center on Campus.

education

U-High To Close in Fall '73; Elementary Programs to Expand

The junior and senior high school grades of the University Laboratory School will be closed at the end of the 1973 summer session.

The early childhood and elementary programs, however, will be improved and expanded, and may include a program for 3-year-olds to go with the 4 and 5-year-old kindergartens.

Dean Bob G. Woods said the decision to phase out grades seven through twelve was made, reluctantly, because of the tight budget situation on Campus which precludes hopes in the foreseeable future of securing funds for needed building expansion and facilities.

Timing of the closing coincides with plans of the Columbia public school system to open the new Columbia Rock Bridge Senior High School.

Dean Woods said that agreement is being worked out with Columbia school officials to use public schools for undergraduate practice teaching, practicum opportunities for graduate students, and teaching and informal research by faculty.

Dean Woods said that because of finances and limited enrollment U-High had not been operating efficiently.

"We know that a minimum of 100 students in each class is recommended for efficiency and we were unable to secure or to accept such large classes," he said.

The School first opened in 1867 as a "model school" as an adjunct to the College of Normal Instruction. It had two rooms and 150 pupils.

While it had the reputation of being a "blue blood" private school, a survey in 1971 indicated that 32 percent of the students were sons and daughters of professors, 32 percent had "blue collar" parents, 16 percent had parents in the professional and nine percent in business categories, seven percent were children of non-academic employees and four percent were children of students.

Education Alumni Choose New Officers



New officers of the Education Alumni Association were chosen at the annual awards banquet in April. Shown are (l. to r.) Dr. Robert Elsea, executive director, cooperating school districts of the St. Louis suburban area, first vice president; Dr. Mary Jane Lang, secretary-treasurer; Mrs. Marlynn Finley, language arts consultant, Parkway School District, second vice president; and Dr. Lyle Hensley, Eldon, outgoing first vice president, who has now become the president.

Angling to Wrestling - 33 Kinds of PE



One of the members of the summer school scuba diving class gets ready to plunge in.

Angling, Archery, Basketball, Bicycling, Billiards, Bowling, Campercraft, Canoeing, Fencing, Field Hockey, Figure Improvement, Flag Football (Women), Golf, Gymnastics, Handball, Jogging, Life Saving, Modern Dance, Orienteering, Recreational Dance, Rifle Marksmanship, Scuba Diving, Self Defense, Skeet and Trap Shooting, Springboard Diving, Swimming, Tennis, Touch Football (Men), Trampoline, Volleyball, Water Safety Instructor, Weight Training, and Wrestling. That's what voluntary physical education offers this fall.

The pool is the "classroom" for the scuba diving course. Bill Busch, assistant professor of health and physical education, models his course after the U. S. Naval training program for skin and scuba diving.

"We cover physics, physiology, psychology, along with all the basics and skills of water safety and first aid," Busch says. "We also concentrate on the study of compressed air and gases, marine life, and the environment."

The course doesn't have to take a back seat to any in the nation," Busch declares. Seven of his former students have become members of the Navy's underwater demolition team.

Professor Teaches in Nepal

Dr. Larry Kantner, assistant professor of art education, has conducted art workshops for elementary teachers in Katmandu, Nepal, this summer.

Kantner served with 20 American educators who volunteered their services to work with Nepali educators. The team was sponsored by the National Education Assn., the U. S. Agency for International Development and the Nepal Ministry of Education.

engineering

Music, Art, Now Technology Appreciation For Students

"Technology Appreciation" may be one name applied to several courses offered by the College of Engineering. Ten courses, many new this fall, are directed primarily at nonengineering students.

Increasing "technological literacy" among non-technically oriented students is a responsibility uniquely suited to the College of Engineering, says Dean William R. Kimel.

A course concerning the constructive application of nuclear energy will be offered for the fourth time this fall. The course introduces basic principles of nuclear theory and many applications, including medicine and generation of electric power. The course has received recognition and support from the Atomic Energy Commission. Dr. Robert L. Carter, professor of electrical and nuclear engineering, and several students prepared visual aids from existing AEC films during the summer at Argonne National Laboratory.

Another course examines the relations between society and the chemical environment and illustrates some of the priorities involved in applying chemical controls to the environment and treats major chemical challenges and the social and moral responsibilities they involve.

An introduction to computing will provide freshmen with an overview of computer design and applications.

Dr. Lennox N. Wilson of mechanical and aerospace engineering will conduct a course examining room acoustics and household noise control as well as physiological and psychological effects of noise.

Basic and Applied Architectural Drawing will be provided for students involved in home planning. The new course will provide home economics interior design students with a more complete treatment of design topics than they now receive. Prospective architecture students, too, may benefit from this floor-joists-and-up introduction to home architecture and construction.

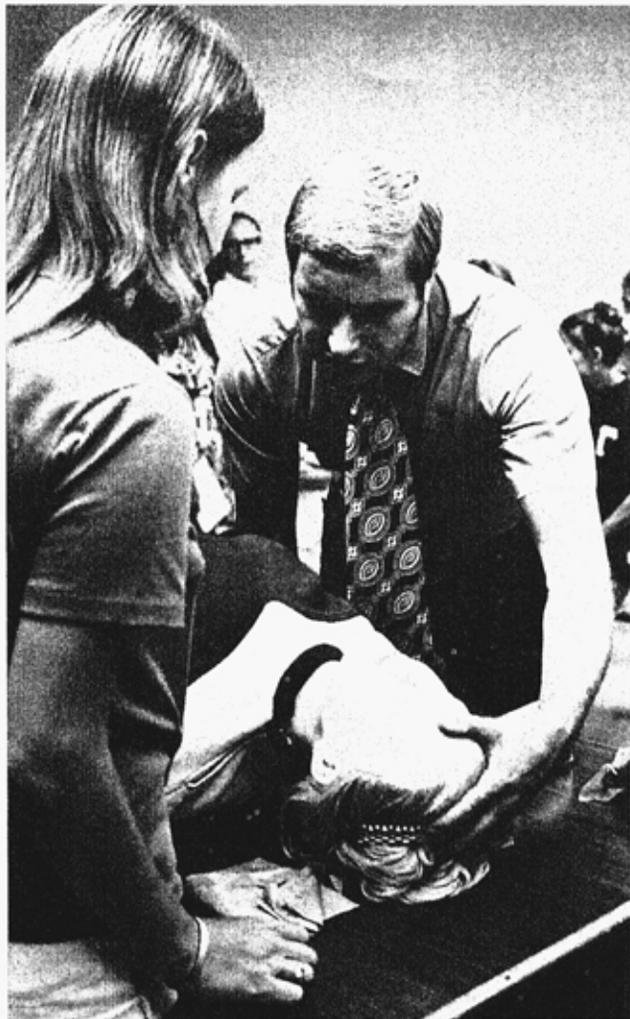
More general approaches to the relation between engineering and society are presented in *The Man-Made World*, offered through electrical engineering, and *Society and Technology*, a joint offering by the Honors College and the Department of Mechanical and Aerospace Engineering. *The Man-Made World* will examine problem areas from health care delivery to population modeling, emphasizing the limitations as well as the possibilities of technology to solve socially related problems.

Society and Technology offers an opportunity for engineering and liberal arts students to compare points of view.

Three more courses illustrate specific areas of cooperation between engineering and the life sciences. Introduction to Biomechanics applies principles of physics to occupational therapy.

Instrumentation for Life Sciences is designed for medical students and other graduate students or faculty in the life sciences.

An Introduction to Bioengineering provides a look at a space age hybrid of engineering. (continued page 10)



Box instructs a student in the proper techniques of giving artificial respiration. As the student breathes into the mouth of the dummy, a meter registers the strength of the short, intense puffs of air.

THE REAL DR. COLIN BOX

PROFESSOR OF THE YEAR

Dr. Colin Box flunked third grade and high school counselors told him to forget about college.

This spring, he was chosen Professor of the Year during Mizzou Daze. The assistant professor of health education was selected by a committee of 10 students from a list of nominees submitted by Campus fraternities and sororities.

Three years ago students had been trying to get Elements of Health Education dropped as a requirement for a degree in the School of Education. But since Box began teaching here two years ago many students say, "It's the best course I've ever had." This fall, five sections will be taught and there will still be a waiting list.

Perhaps one of the reasons he is so popular with his students is that he doesn't fit the stereotype of the pipe-smoking absent-minded academician.

Intent on a student's question, Box displays the interest and real concern that made him the Greek's choice for Professor of the Year.





The gory wounds are plastic. The blood is colored water. But these students take them seriously as they cope with a realistic crisis provided as an exercise by Dr. Box in Elements of Health Education.

Turned down for admissions at several colleges in his native Canada, he packed two suitcases and bought a bus ticket to the United States. He arrived one Sunday night on the campus of Indiana University with \$53 in his pocket and spent the night stretched out on a stone bench near the administration building. Monday morning he knocked on the door, and Indiana let him in. "I'm extremely grateful to Indiana," he says.

But his first semester, Box made five hours of F in Zoology. "I'd never seen a multiple choice test," he explains. There were other things to adjust to in the States. One of his professors told him years later that she couldn't understand what Box was doing in her class. Every time she called on him, he stood beside his desk. She thought he was going to walk out of the class, but, finally, she realized that standing to recite was the custom in Canadian schools.

He received his BS, returned to Canada and entered the Royal Canadian Air Force as a career flying officer. "I was a hot shot pilot with a silk scarf and a million dollar aircraft and it didn't mean anything," he recalls. "My boyhood dream had been to be an officer. Some aspects of the life were tremendous, but over all I found I wasn't growing adequately as an individual in that role. Quite reluctantly and with mixed emotions, I left the Air Force."

As a collateral duty he had done counseling about drugs and alcohol. As he read, he became more and more interested in health education.

He returned to Indiana and received his MS and HSD (doctorate in Health and Safety Education) degrees. He was an instructor at Indiana for a year where he received the Lieber Memorial Distinguished Teaching Award.

His course, Elements of Health Education, deals with drug and alcohol abuse, emergency procedures, human sexuality, and consumer quackery—interesting subjects. And Box adds his "dynamic, energetic, provocative, real" personality, group discussions, ex-drug users and alcoholics as speakers, films, and role playing. He has abandoned his schoolboy formality, and students respond to his "Hellzapoppin'" approach. Not only do they enjoy class, but they make notes on his unusual teaching techniques so that they can use them when they get into the classroom.

"When we're doing mouth to mouth resuscitation," Box says, "I always get my wife to come into the class and sit in the back. I ask for a volunteer to demonstrate the technique on. The students are a little embarrassed.

Then my wife raises her hand slowly and I ask her to come up to the front. The students don't know she's my wife and they watch very, very closely," he laughs.

The most intense class discussions concern abortion, VD and the legalization of marijuana, Box says. Students not only get the available facts from a wide variety of sources, they confront their own value systems, and learn to read and think critically.

"He has me thinking," one student says. He asks questions like "How high do you want society?" He's hard on pat answers and hypocrisy. He makes you examine your inconsistencies."

"I aim not for a single point of view, but for students to think through a consistent philosophy, one they can live with," Box says.

"Teaching is a hell of a high for me," Box says, talking fast, punching the words out. "I love students. I'm optimistic about them. I like sharing experiences. I learn as much as they do. I think it is important to try to be real. Teaching offers a great opportunity to realize your potential. And, quite honestly, it's also ego satisfying to me."

Older students are as full of praise as the undergraduates. Box taught a two-week summer institute in July for teachers and school personnel on drug abuse. (A new Missouri law requires schools to offer a continuing program in drug education from kindergarten through high school.) One nun wrote in her evaluation of the course, "Sometimes, I rebelled a little within myself, because you really made us face issues, but most of all you made us face ourselves." Another teacher wrote, "I felt many times confused. I wondered if I had lost my own set of values. I was always exhausted when I got home from class. It was trauma, but it was productive trauma."

Thirty-year-old Box is not exhausted after a class. He still takes the steps up to his second-floor office in Rothwell Gymnasium two at a time, his voice roaring a hello to students and colleagues. He doesn't have time to waste. He is consultant for the St. Louis School District on drug education, is on the chancellor's committee on drug abuse, is working with the Columbia Drug Abuse Council and a local group on alcoholism, and is in demand as a guest lecturer. He gave about 70 talks to school districts, juvenile courts and clubs last year.

And last year Box went back to his old high school in Canada where he'd been told he wasn't college material to set up their drug education program. □

The course will acquaint students with the fundamentals of human physiology and physiological measurement techniques.

Stronger Dental Fillings Developed by Research Team

You may soon be making fewer trips to your dentist.

A team of engineers and dentists has developed a method of mixing dental amalgams (silver fillings) that should make them at least 30 percent stronger. The University has just filed a patent application on the new process, although details are not being released until the patent is finalized.

The research and testing were conducted by Dr. David A. Hansen, a physical metallurgist in the Columbia Campus College of Engineering, and Dr. David L. Moore, a faculty member in the Kansas City Campus School of Dentistry.

They proved they could increase the tensile strength and fracture resistance of present amalgams simply by reducing the time they are exposed to various impurities in the air, including moisture.

If you're an average American, your teeth have about 5½ amalgam fillings. Almost a third of these fillings will have to be replaced. Most of these failures will be the result of biting down on something unexpectedly hard.

Right now, U. S. dentists are filling about 200 million cavities a year.

"According to some surveys we made a few years ago," said Dr. Jack L. Stewart, associate dean of the School of Dentistry, University of Missouri-Kansas City, "up to 40 percent of a dentist's time is occupied in replacing defective restorations—with amalgams, of course, making a major contribution.

Murphy Gets Environment Award

For his pioneering work in water pollution control that began half a century ago, Lindon J. Murphy, professor emeritus of civil engineering, has been named recipient of the first national award to be made by the Environmental Protection Agency.

He was chosen for his 50 years of leadership in the field of sanitary engineering and environmental control, and awarded a certificate and plaque for "meritorious achievement in his efforts to bring about a cleaner environment."

A specialist in sanitary and public health engineering, Murphy holds three degrees in civil engineering from Iowa State University, Ames. He taught sanitary engineering there from 1926 to 1943.

Average Starting Salary For '72 Grads Is \$10,400

Questionnaires returned by June '72 graduates of the College of Engineering reflect the brightening employment picture for today's young technical people.

Don't Knock the Boat -- Concrete Canoe Is a Winner



It floats! Dr. Jay B. McGarraugh, associate professor of Civil Engineering, and Bob Marlin, '72, take the concrete canoe out for a trial run. Marlin and Wyth Miller won their heat at the race.

A racing team from the College of Engineering finished a strong second in the 17-university field that turned out for the Second Annual Purdue Invitational Concrete Canoe Race.

Held in the spring in Indianapolis, Ind., the event attracted entries from such universities as Notre Dame, Michigan, Ohio State, Illinois, Michigan State, Northwestern, and Wisconsin.

Sponsored by Midwest student chapters of the American Society of Civil Engineers, this competition challenged engineering students to build and race a canoe of reinforced concrete of their own design.

Mizzou's canoe measures 14 feet in length, has a beam of 3 feet, and weighs 240 pounds. The lightest concrete

canoe, and the winner, weighed 150 pounds; the heaviest, a portage-discouraging 600 pounds.

The civil engineering students first built a plaster mold in the shape of the hull they wanted, then added three layers of reinforcing chicken wire. Next, a mixture of Portland cement and a fine aggregate was laid on about 3/8" - 1/2" thick and smoothed by hand. Final step was sanding the exterior of the hull and painting it gold with black letters.

In the faculty races, civil engineering professors Jack J. Cassidy and John R. Salmons drove the Missouri concrete canoe to a strong third place finish behind the winning 150-pound canoe of host university Purdue and the University of Michigan entry.

The average starting salary reported by members of this class is \$10,400. That's about \$400 a year more than the average salary accepted by Mizzou's new engineers last year.

Almost 42 percent of the reporting graduates are earning more than \$10,500 a year, with 18 percent beginning their careers at annual salaries in excess of \$11,400. Most of these BS degree graduates are working in industry, 10 percent have joined the armed services, and 22 percent are still in school working on graduate degrees.

Best estimates are that engineering employment by 1975 will be 20 percent higher than it was in the top-hiring year of 1969.

"To meet this unprecedented demand," said Dean William R. Kimel, "U. S.

schools will have to graduate about 200,000 new engineers by 1975. This fall's entering freshman engineering students should find waiting for them at graduation a job market—both technical and nontechnical—of unparalleled diversity and opportunity."

Technology will have to help find solutions to the problems in housing, transportation, the environment, and the production of energy and food, he added.

"Not one of these problems can be solved in the isolation of a single discipline," he said, "but it's obviously the engineer who will be called upon most often. He's the one who will have to develop new products, improve industrial processes, and come up with whatever technical innovations are required to alleviate these crises.

Student's Thesis Judged Best

John P. Dittmann, a doctoral candidate in the department of industrial engineering, has been named first-place winner of the AIIE (American Institute of Industrial Engineers) graduate research award. His thesis, "Surrogated Linear Programming: An Alternative Technique for Linear Programming," was judged best in the country in this graduate student competition sponsored by the IBM Corporation.

Dittmann received a plaque and \$500 at the AIIE convention held in June in Anaheim, Calif.

forestry

Forestry School To Work On United Nations Project

The School of Forestry has been awarded a one-year contract by the United Nations to assist in determining the economic potential of forests in Surinam, South America.

The School will assist in the first phase of the project which is to provide computer services to study forestry resources and volume in this Dutch owned state.

Andrew J. Nash, professor, will be consultant on the project. He spent last August in Surinam working with Roger DeMilde, U.N. Food and Agriculture staff member.

Forest's Value Assessed

The University Forest, located in Wayne and Butler Counties, near Poplar Bluff, Mo., covers 7,200 acres and is the center of considerable research carried out by the School of Forestry. The Forest is also the field laboratory for practical demonstrations and training for the students who spend seven weeks between their sophomore and junior years at the Forestry Summer Camp.

To determine how fast the forest is growing, a series of permanent sample plots was established 15 years ago. All 180 plots were randomly located and have been measured at five year intervals. The measurement data have

been punched into computer cards and programs written to find out how many cubic feet of wood and board feet of sawtimber are present at each measurement and how fast the growth is.

From 1952 to 1967, the cubic foot volume of trees 5 inches in diameter and larger has just about doubled, with an average yearly growth of 6 percent. Volume of the larger trees, 11 inches in diameter and over, was also estimated in board feet; the total volume of board feet on the Forest was 6.1 million in 1952 and 20.8 million in 1967 for an average yearly increase of 16 percent. The value of the trees on the stump is in excess of \$200,000 and many times that as manufactured lumber.

"The benefit of the University Forest to the School of Forestry can not be measured only in terms of volume or dollars. It is essential in the instructional program of the School in providing a place for students to gain practical experience in many of the technical phases of forestry. In addition, it is an important adjunct to the School's research program," Director Donald Duncan says.

Ecologists Swell Enrollment In Mizzou's Forestry School

Mike Giovanini has never lived on a farm. He chose his major because he liked the out-of-doors and wanted to escape a desk job. He is typical of an increasing number of Mizzou students who are entering forestry.

For him, forestry was a natural choice after he spent several summers working for a forester. He liked the work and decided to get into the profession.

Others are finding new reasons for choosing forestry. The recent ecology kick has cornered more student interest.

"There is a real interest in ecology in a broad sense," J.M. Nichols, associate professor, agrees. "This is one of only two places on Campus where an ecology student can hang his hat and get a degree." Biological sciences also attract the ecology-minded, he adds.

"Our curriculum has only one course that has 'ecology' in the title, but there are probably half a dozen courses that are either ecology or ecology-based.

"Mother Nature can be pushed and plant associations can be changed, but you can't push them too far. And this is where ecology comes in. A person who doesn't understand these relationships (between land and production) can't hope to manage a tract of land for any purpose without getting into trouble."

Though forestry accepts the ecological concern over land misuse, Nichols thinks there is an overemphasis on the increasing scarcity of forest resources. Some studies, for example, have suggested our wood supply will be threatened by the year 2000. "I guess I'm unable to take this all that seriously," Nichols says.

"I'm not worried about our supply of

wood. We can become more intensive in our management than we have in the past" because of improved plant growth techniques. "The main difficulty is that we have so many people who feel we need to preserve forests. You can't grow wood and at the same time quit cutting it.

"You're in a real paradoxical situation. I have the feeling that the person who will scream loudest about preserving forests will also scream bloody murder if he doesn't get his daily newspaper."

World Forestry Congress To Meet in Buenos Aires

The School of Forestry will be represented at the Seventh World Forestry Congress by Dr. Richard Smith who will present a paper coauthored by John Pierovich of the U.S. Forest Service on choosing sound alternatives for reducing wood waste in management of forests. The Congress will be held in Buenos Aires, Argentina, Oct. 4-18, 1972. Every six years foresters throughout the world get together to share knowledge, experience and ideas. Some 3,000 foresters from 80 countries will attend.

home
economics

Student's Relief Decorates Entry of University Hall

A wood relief 15 feet long, designed and constructed by Steve Teczar, decorates the main entrance of University Hall. Teczar, a graduate student in housing and interior design, made the relief of walnut, oak, pecan and cherry woods fastened to a plywood backing with epoxy glue and nails.

After the parts were glued together, Teczar had the relief sandblasted.

He sprayed the relief with an acrylic sealer which leaves the grain visible but highlights contrasts.

The project began more than six months ago when Jay Porter, interior designer for the University, became interested in obtaining a relief for the hall after he saw similar projects in the Campus Memorial Union.

Kathryn Cason Is Mature Woman Scholar



Kathryn Cason is the first recipient of the Phi Upsilon Omicron scholarship given for a "mature woman." The \$200 award was offered specifically for women over 30 by the Chapter.

A bank loan, a special examination to earn college credits and close family cooperation are part of a family management plan developed by Kathryn (Mrs. Merrill) Cason of Columbia, to help her obtain a college degree.

This is a practical application of family economics and management, her field of study in the School of Home Economics.

Another major help was winning the first annual Phi Upsilon Omicron scholarship for a "mature woman."

She entered as a freshman in the summer of 1971 and enrolled in regular courses in the fall, then took the College Level Entrance Program (CLEP) tests.

"CLEP is a boon to the adult student," Mrs. Cason says. "I 'tested out' of 21 hours of college classes. When you have waited this long to go to school, you know you have acquired information in many areas. I was able to 'test out' of two semesters of English, one of humanities, social science and biological science."

"I want to work with low-to-high-middle income families in management of their resources -- time, individual abilities and the energies of all members of the family.

"Many of them, especially in the low-

income range, are not aware of government agencies that offer assistance with their problems.

Mrs. Cason feels ways must be found to help people understand family management without the lack of reading ability getting in the way.

"I'm going to be looking for a more viable method of communicating with people who don't read the paper.

"Perhaps I am more aware of visual communications because my husband is an artist. I'm sure we will collaborate on audio-visual methods to reach families about management.

"And I will be taking audio-visual, sociology and psychology courses as part of my 23 'undeclared' hours of class.

In her statement of purpose for the scholarship, Mrs. Cason said she borrowed the entire amount for her tuition and books from a local bank. Lowered interest rates on long term loans are available to students through the National Defense Act. "I did not feel I should use 'family money' for my personal project," she said.

"One could consider this way of financing my education as a concrete example of sound family management, the very thing I am interested in doing. Going back to school will not be a financial burden on my family. I will pay back the money out of my earnings.

"The scholarship from Phi Upsilon Omicron is an honor, and will be a great help to cover supplies and special expenses for projects and computer costs for research."

Eileen Lineberry, director of continuing education for women on the Columbia Campus, calls the PUO scholarship a "fine move forward. University continuing education and extension non-credit courses have discovered many women who would like to go on with their college educations. In recent weeks, I have talked to several 'stopouts,' women who left college to marry and have families. Now these women are available for the job market and they have much talent to offer. But there are real financial problems when it comes to going back to school. We hope this first scholarship for the mature woman will initiate many more."

installation of the new chapter of Omicron Nu, and student activities.

Five alumni from the Detroit area were in charge of the reception: Mrs. Polly (Allen) Chung, Detroit; Jean Logan, Detroit; Mrs. Eleanor (Sharp) Musgrove, Dearborn; Mrs. Helen (Hedrick) Nutter, Livonia; and Mrs. Gale (Rauscher) Howard, Ann Arbor.

Dr. Beverly Crabtree, associate professor and co-ordinator of home economics education, was elected secretary of the Home Economics Teacher Education Committee of the American Home Economics Association. She took office at the Detroit meeting.

journalism

California Alumni to Meet

Dean Roy Fisher and Placement Director Robert Haverfield will attend three western meetings of the Walter Williams Club in San Diego, Los Angeles, and San Francisco. Sam Cook Digges, national president of the journalism alumni organization, and president of CBS Radio, will accompany Fisher and Haverfield.

Randall Mitchell, Mitchell & Associates, San Diego, is chairman of the San Diego luncheon, Sept. 26. Ted Weegar, Los Angeles Times, is hosting the Los Angeles meeting with the assistance of Ross Adams, Sept. 27. Al Scollay, KRON-TV, is chairman of the Sept. 29 San Francisco meeting. All area journalism alumni and their wives and husbands are invited.

Science Program Funded

The School of Journalism is beginning a new program to improve public understanding of science under a \$50,000 grant from the National Science Foundation.

The program provides for seminars for news editors, research studies into public attitudes and concepts toward science, and work with the scientific community to improve its own public statements concerning scientific developments.

Alumni Plan District Meetings

The Home Economics Alumni Association will hold annual district meetings beginning this fall.

Meetings are being planned to keep alumni informed about the School of Home Economics, to work on ways to strengthen the Home Economics program, and to generate enthusiasm for support and participation in the Home Economics Alumni Association.

District chairmen will be contacting

alumni about the date and place of the fall meetings.

Slides Show Year at UMC

"This Year At UMC" was the title of a slide story given by Dr. Margaret Mangel, director, at the annual reception for Missouri Alumni during the American Home Economics Association Convention in June in Detroit.

The slide story showed highlights from this year, including Role and Scope, the visit of the accreditation team,

Project director is Dr. William Stephenson, distinguished professor. Associate director is Dr. Joye Patterson, associate professor.

J-School Starts Urban Center

The School of Journalism at the Columbia Campus is establishing an Urban Journalism Center in St. Louis.

The center, which will be staffed by faculty appointed jointly by the School of Journalism and the University of Missouri-St. Louis, will provide journalism students with experience in mass communications in large urban areas.

Students from the Columbia Campus may take one semester of their undergraduate or graduate studies at the Urban Journalism Center on the St. Louis campus. Their curriculum will include special courses in urban journalism offered by the Center faculty and elective courses chosen from the regular offerings of the St. Louis campus.

Spencer M. Allen, an alumnus, directs the Center. Allen has received a full-time appointment as an associate professor in the School of Journalism and will be housed in the department of English on the St. Louis Campus.

Allen also is teaching a course for non-journalism or pre-journalism students on the role of the press in society.

He also is assisting the St. Louis administration as an advisor to student publications and to pre-journalism students who intend later to enter the School of Journalism at Columbia.

"In many ways, the Journalism School's location in Columbia is ideal," Dean Roy Fisher said. "But Columbia cannot confront future newsmen with the clash of cultures, the complexity of public problems, and the association with urban society that they can find in St. Louis. To understand and be able to report effectively the problems of urban society is the greatest challenge of journalism today."

Fisher pointed out that the Urban Journalism Center is only one unit of the comprehensive program of public affairs reporting offered by the Missouri School of Journalism.

Already in existence is the school's graduate program in national reporting, located in Washington, D. C., and its graduate program in international reporting, located in London, England.

He said that a proposal to establish a state government reporting program based in Jefferson City is pending before state and federal agencies and may be underway before the end of the year.

FOI Gets ANPA Grant

The American Newspaper Publishers Assn. has given a \$15,000 grant to the Freedom of Information Center to aid the Center's uncertain financial

situation. The ANPA reported the grant in its June 22 Bulletin.

The ANPA board of directors said it had offered the grant for the remainder of 1972 without any commitment for any further support and with the stipulation that a complete assessment of the role of the Center should be made before the end of 1972. "The remainder of the year will be a period of analysis of the Center's problems and of its policies," Dean Fisher said.

May Graduate Covers N.Y., Paris Fashions



Mari-Anne Messmann, BJ '72, kept *Missourian* readers up to the minute on fashion with her reports from the American Designer National Press Week showings in New York and the Paris openings of fall and winter collections of *Chambre Syndicale de la Couture Parisienne*.

Students, Colleagues Prepare Book in Stephenson's Honor

Dr. William Stephenson, distinguished research professor, was honored in May with a presentation of a book of essays written in his honor by his colleagues.

Donald Brenner, associate professor, and Steven Brown, associate professor of political science at Kent State University, collaborated in organizing the book entitled, "Science, Psychology and Communication: Essays Honoring William Stephenson."

Stephenson, who holds doctorates in psychology and physics, is well known as the father of "Q methodology," a method of psychological testing used to generate research data. He is a prolific writer and scholar in many fields and is also known for his research in advertising.

Stephenson also was presented with congratulatory messages from many colleagues unable to attend the ceremony. Dean Roy Fisher said the proceeds from the sale of the book will be placed in a

private fund named for Stephenson for a doctoral candidate doing work in psychology or journalism.

KOMU Expands News Coverage

Bolstered by some \$125,000 worth of new color cameras and related equipment, University of Missouri television KOMU, Channel 8, will lengthen its 6 p. m. news program from one-half hour to one hour beginning Sept. 11, Robert E. Dressler, general manager of the station, says.

Dressler said his decision to expand the program was prompted by public need for better news coverage and journalism students' needs to increase their involvement in the news production process.

Dressler said the longer time slot for the station's nightly news program "will allow us to cover more of our 28-county broadcast area, not just Broadway." With its signal spanning a 75-mile radius around Columbia, KOMU will devote more air time to local events in mid-Missouri's communities, including Fulton, Jefferson City, Marshall, Moberly and Mexico.

Acquisition of two radio-equipped remote units will make this possible, Dressler explained. A new sound camera and a color film processor also are part of general upgrading of the station. The processor will make it possible to telecast a news story in color less than an hour after the film is received at the station.

Though the early evening news time will double, advertising time will remain the same, 16 minutes, Dressler said.

law

Law Summer School Begins Early

The School of Law has struck a blow for practicality in this age of bureaucratic impracticality.

Law students began their summer session two weeks ahead of the rest of the Campus so summer graduates could take the Missouri Bar Examinations July 27.

This meant summer graduates, providing they passed the exams, could begin their law practices seven months earlier. The exams are given only twice each year, now in February and July.

Jack O. Edwards, dean of the law school, said the arrangement was reached through discussions among the 150 students scheduled to attend this summer's classes, the faculty of the school, and finally, by petitioning the Board of Curators for approval of the unprecedented move.

Students Gain Experience, Insight, Academic Credit

When a student went on trial for a traffic ticket in April, he found a student prosecuting him.

The law student was earning three hours of academic credit working for the Boone County prosecutor.

Each semester, 16 third-year law students work in the prosecutor's office, for the public defender or with inmates at Missouri Penitentiary in Jefferson City.

They take minor cases to court, investigate crimes and give legal advice.

Charles Roper, Boone County public defender, says the five students who worked with him spring semester were a "great help" to the indigents he defends.

He says students perform some services, such as in-depth investigations, that just would not be done if students did not do them.

The four students in the prosecutor's program handle preliminary hearings and cross examinations. Like their counterparts with the public defender, they also do legal research and investigate cases.

Traces of idealism were apparent among students in the program at Missouri Penitentiary. Here, students' reasons for participating ranged from a desire to help allegedly oppressed inmates to a need to "see what prison is like so we have the knowledge needed to change the system."

At the prison, students advise inmates with legal problems. Professor Gary Anderson, who administers all three programs, said most cases involve divorce suits and habeas corpus motions.

Students Hope to Increase Legal Aid for Indigents

A group of law students, the Independent Legal Services Association, is providing free legal services to indigent residents of Boone County.

The students, all of them at Mizzou, can do this under a Missouri Supreme Court ruling which allows third-year law students to provide legal counsel and appear in court for indigents under the supervision of a practicing attorney. The program, which was discontinued last year after it was instituted in the winter semester of 1971, was revised this January. About 15 students are now taking part in the program under the supervision of nine local attorneys.

The cases, explained Jim Jacobsen, the law student most responsible for setting up the program this year, mainly involved civil matters and misdemeanors, including landlord-tenant relations, tax and debt problems, insurance cases, divorces and other domestic affairs, and disputes over social security problems and welfare eligibility. Felony charges are handled by the Boone County Public Defender.

The legal aid association holds office Wednesday evenings at the Central Missouri Counties Human Development Corporation. The HDC provides office space and supplies.

library and information science

Professor to Study Woodcuts

Dr. Helmutt Lehmann-Haupt, professor of library science, has received a University research grant for the study of 17th century woodcut art.

Lehmann-Haupt said he hoped his work would show the neglect of that period's woodcutting as an art form. He intends to write a book on the subject.

After receiving his PhD from the University of Frankfurt, Lehmann-Haupt came to the U.S. where he served as curator of rare books for Columbia University. While there he also taught the history of rare books.

At World War II's conclusion, he worked with American authorities in Germany restoring Hitler-seized art objects to their owners. After a sixteen-year association with a rare book dealer, Lehmann-Haupt joined the library science faculty in 1969.

Librarians See Music Resources

Librarians attending a summer institute on Campus examined the resources of the Art, Archaeology and Music Library.

James M. Burk, associate professor of music who was principal lecturer for the institute, "Perspectives in Music," calls the library "one of the better music collections in the Midwest." He says the balance of scholarly sources and items for general circulation made

it of special interest to public librarians attending the institute.

The visit to the music collection on Aug. 24 was followed by two days devoted to the historical approach to music, a day at the Missouri State Library in Jefferson City and a session on building a record library.

The institute was part of an annual series of in-service institutes financed by the Missouri State Library under a federal grant. They are held with the cooperation of the School of Library and Information Science, assisted by the Conferences and Short Courses Office.

An outstanding feature of the music collection at the library is the large number of "collected editions," which hold all works of a composer. The music library has a national reputation in the classics, Burk says, and musicians have been referred here from many other libraries, including the New York Public Library.

Largely responsible for development of the music collection is Andrew C. Minor, professor of music history, now associate dean (for humanities) of the Graduate School and director of the Collegium Musicum, which performs early music. Burk is chairman of the music department library committee.

medicine

Mizzou MEDHIC Program Most Successful in Nation

Missouri has placed a higher percentage of veterans into health careers and health education programs than any other state in the nation, according to the national headquarters of the Military Experience Directed Into Health Careers (MEDHIC) Program.

Lynn Martin, director of intercampus instruction, is coordinator for the Missouri MEDHIC Program. He has placed almost nine out of every 10 veterans who have applied for positions in the health field.

The program was funded in 1971 by the Department of Defense and the Department of Health, Education and Welfare. During the year, Dr. Martin

has placed 222 of 253 applying veterans.

The figures released by the national MEDIHC headquarters show Oklahoma second with 80 percent of its applicant veterans placed and California third with 67 percent. Only six states, including Missouri, placed more than 50 percent.

According to Dr. Martin, "The number of veterans is increasing with the winding down of the Vietnam War and they are finding it difficult to get positions in a tightening job market. At the same time the health field desperately needs people qualified to perform many health-related services. Through MEDIHC we are able to use, rather than waste, the valuable medical training many veterans received while in the armed services."

Because of the success of the Missouri program, HEW and DOD have allocated funds to expand the program and staff on Campus. "Recently we were asked to host a regional meeting of MEDIHC coordinators," says Dr. Martin, "and we have also received funds to make a film about our program to be used nation-wide to inform veterans about the program and to encourage medical agencies to participate."

Studies Plot Hospital's Future; Greathouse Appointed Director

The appointment of Joe S. Greathouse Jr. as University Hospital director is part of a plan to plot the future course of the hospital and its clinics, and to upgrade patient care, Dr. William D. Mayer, director of the Medical Center and dean of the School of Medicine, says.

Greathouse, formerly of Vanderbilt University Hospital, Nashville, began work in August.

Greathouse is responsible for "the total functions of the hospital," Mayer said, explaining this would include fiscal matters of the entire Medical Center and significant work with patients.

Two studies were commissioned earlier this year on which future policies will be based. One was by an in-house group; the other by an outside consultant from the Assn. of American Medical Colleges.

"The ultimate implementation of the recommendations of the two reports should significantly improve our capability of meeting our responsibility for the health care of the citizens of the state of Missouri," Mayer said.

Under recommendations made to Mayer, the University Hospital would admit patients "upon personal request" as well as by the current policy of doctor referrals.

The policy recommends the University Hospital "should accept medically indigent patients for hospital care only to that degree for which specific funds are available to provide that care."

The in-house study also looked at "attitudinal" problems among aides and orderlies. Mayer said the hospital must

devise adequate in-service training programs for its help and create a "commitment" attitude. He pointed out, however, that in most instances, including a recent personal one, the patient care was very good.

Among other changes recommended is that parking be made more convenient for patients, visitors and staff personnel, Mayer said. Inside, air-conditioning ought to be installed in all patient care areas, the dean continued. He said air-conditioning could cost \$1.7 million, and that the lack of it does have an impact on lowering the number of patients referred to the hospital during the summer.

Mayer said that though the Medical Center exists to provide health care to the entire state, "more effort should be placed on relationships within the immediate environs of mid-Missouri... representing eight counties." He advocates more liaison work between the University Hospital and Boone County Hospital "to explore the possibility of joint medical staff privileges in the two institutions."

Dial-A-Doc Gives Information

Have you ever wished you could pick up a phone and get the medical information you wanted, when you wanted it, in nonmedical terms that are easy to understand?

Now, with a unique system developed by a group of Campus scientists, you can do just that.

The Information Science Group, headed by Dr. Donald A. B. Lindberg of the School of Medicine, has set up some 23 recorded messages for the general public which can be dialed any hour of the day.

The minute-and-a-half-to-five-minute messages are geared to the layman and minimize technical terms which are foreign to most people. When medical jargon must be used, it is fully explained. The process of atherosclerosis or hardening of the arteries, for example, is described as similar to the corrosion which occurs in old pipes.

The system holds tapes dealing with cancer, cerebral palsy, heart and related problems, muscular dystrophy and diabetes, but the group members said they were anxious to get some messages on tape that deal with drug problems.

The public health information got under way last year when the Information Science Group put on special material about diabetes in cooperation with the Central Missouri Diabetes Association. This trial effort, with little publicity, brought in some 600 calls during a two-week period last November.

New Faculty Appointed

Dr. A. Sherwood Baker has been appointed chairman of community health and medical practice; Dr. Leslie L.

Eisenbrandt, chairman of pharmacology; and Dr. William T. Griffin, acting chairman of the department of obstetrics and gynecology.

Dr. Baker will supervise the teaching of approximately 60 graduate students in community health sciences, community health services, community health education, health care studies, and health services management.

Dr. Baker also is in charge of the medical practice section which includes all the general practitioners on the faculty. He continues to coordinate the preceptorship program for medical students, who spend four weeks working with a private practitioner in the community setting, usually in a small town in the state.

Dr. Eisenbrandt replaces Dr. Bertis A. Westfall who retired.

Dr. Griffin serves as acting chairman of obstetrics and gynecology while Dr. David G. Hall is on sabbatical.

Dr. Harry H. White has joined the faculty as professor of medicine and chief of the section of neurology.

After graduating from K. U. medical school, he did his residency at Columbia University's Neurological Institute in New York and served as chief of neurology service at an U. S. Army Hospital in El Paso, Tex.

In 1965 he was named a Markle Scholar, one of the country's 25 outstanding young physicians in academic medicine.

Lodwick Receives Award

Dr. Gwilym S. Lodwick, cited as the "father of computer applications in radiology," was today named recipient of the Sigma Xi research award for 1972 on Campus.

Announcement of the award which honors the research contributions of a faculty member was made by Professor Norman Rabjohn, president of the honorary science fraternity, at the annual Phi Beta Kappa-Sigma Xi luncheon in May.

A \$500 stipend and a framed certificate will be presented to Dr. Lodwick at an award banquet in November when he will address the membership of the Missouri chapter of Sigma Xi on the significance of his work. His name will be inscribed on a plaque in the sciences section of the main library. Another plaque will hang outside his office door until next year's recipient is chosen.

Professor and chairman of the department of radiology in the School of Medicine, Dr. Lodwick is recognized as one of the world's specialists in the development of computer diagnosis and automated information systems which contribute to scientific advances in medicine.

Dr. Lodwick has been largely responsible for interdisciplinary research programs between radiology, industrial and electrical engineering on Campus through (continued page 18)



William Fratcher, law professor, sits in his small, squarish, office full of books, prints of English courtroom scenes, a world almanac and a huge, worn, black Bible (inscribed to his grandfather of the same name who won it in a spelling bee). He is apparently well-suited to the room's atmosphere of placid and comfortable scholarliness. A gentle, beamish man in a conservatively cut grey suit, Fratcher is a legal researcher, scholar, member of the Council, Probate and Trust committee of the Missouri Bar, and, though he would probably raise an eyebrow at the term, reformer.

MIZZOU'S GENTLE REFORMER IS CHANGING THE LAW



Heretofore mild eyes sparkle as he explains that academicians can nudge society along: "Our only agencies for improvement of the law — not just lobbyists — are law teachers. We have a function of using our position to write and think about improving the law."

Improving the property transferal laws (in legal jargon—freedom of alienation) is his primary concern. He sees (and the reformer begins to emerge) freedom of alienation as "very important to achieving and keeping a successful free society."

Proffering a thin, much-thumbed brown book of yellowing pages (Thomas Scrutton's 1886 publication, *Land in England*), Fratcher elaborates on his theme. "In a completely socialist society, resource allocation is handled by the government. In a free economy, allocation of resources—of which land is the most important—is accomplished through private contracts."

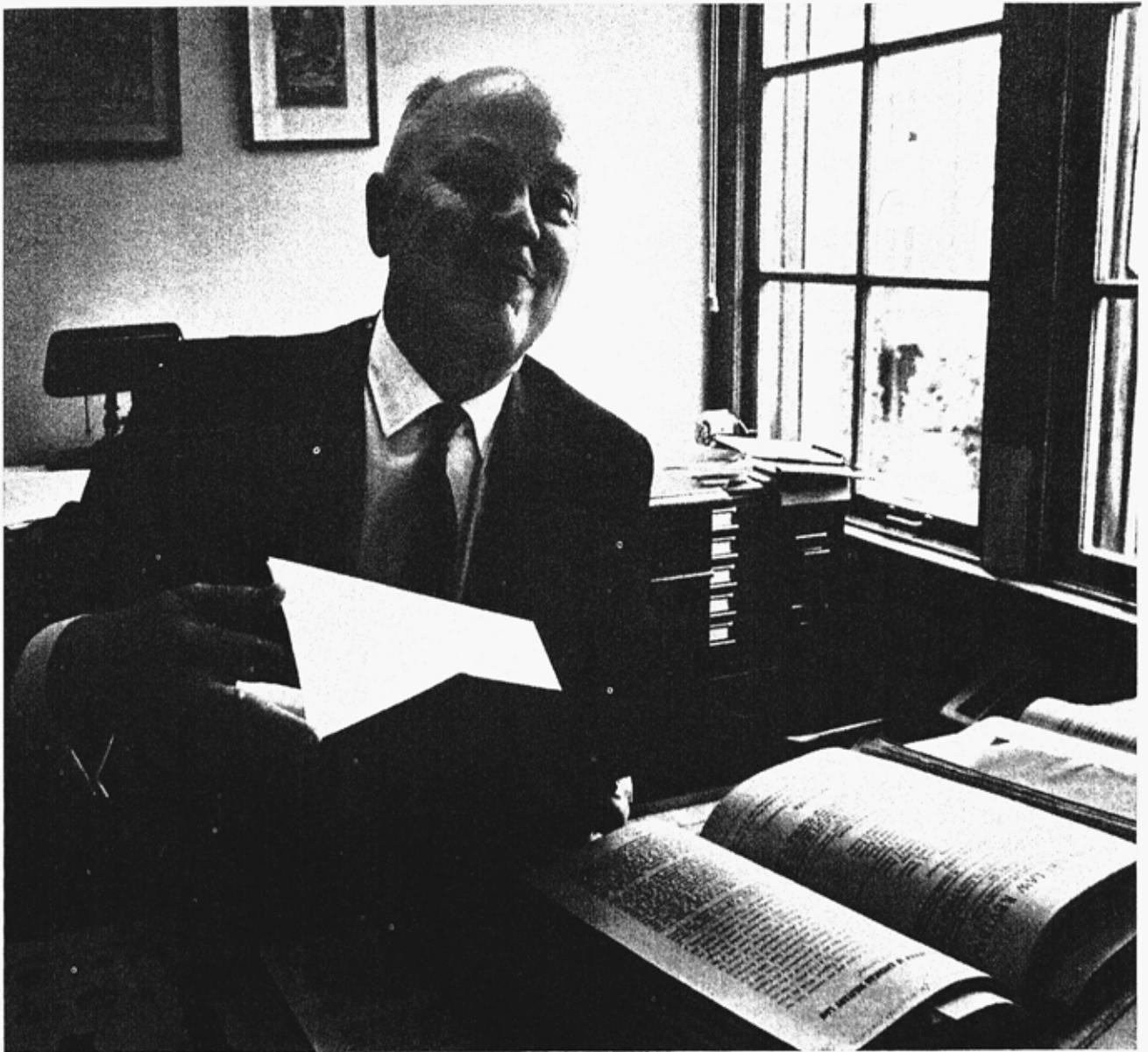
Frequently, private contracts include provisions for tying up land—entails, future interest, trust, direct restrictions on sale. So the problem arises, Fratcher explains, that for varied private motives people tie up land indefinitely, so that it can't be sold or mortgaged, even if the owner can't afford to develop or improve it.

Fratcher is convinced that a great deal of our land "is a waste. We lower the general standard of living and economy. Look at the Ozarks."

In many cases, the land is not only wasted but also an albatross round the heir's neck. Fratcher cites one Missouri case involving a "crippled 60-year-old secretary whose land is bequeathed to the heirs of her body. She's single and not likely to have children at this point. She can't afford to develop the land, which could be sold for \$32,000, but the court held that under the transferal terms she couldn't sell, couldn't mortgage. So the land just sits there, idle."

This sort of entail practice was established by King Edward in 1285. "And Missouri's 1860 law, reworded in '45, is worse than that, worse than ever!" he continues indignantly, speaking of one law he's working diligently to change.

Another land tie-up provision makes trustees powerless to sell—Fratcher's reform proposals in this area have al-



ready been adopted by 15 states. He's also drafted legislation for the National Conference of Commissioners in uniform estate laws. Persistently, patiently, he works toward effecting changes, through drafting legislation, article publication and friendly persuasion. "Under the uniform veterans guardianship act, it's impossible to use land purchased in whole or in part under veteran funds, and this has been going on since the Civil War. But," and he smiles shrewdly, "I think I've finally gotten through to the Veterans Administration."

While the reformer's zeal is there, it's the quiet zeal of a good-humoured scholar; not fanatic, not hurried, but patient and confident of the long run.

Though he takes pride in his work, Fratcher is essentially a modest man who tends toward quickly passing over his accomplishments and pointing out what needs to be done. Characteristically, he does not volunteer information about his work at Nuremburg until directly questioned,

and even then responds as if to imply that today is a long, long way from the famous war crime trials. He was there to draft legislation adopted by the Eisenhower-Zhukov-Montgomery-Koenig control council, in post-World War II occupation days. Fratcher helped set up the actual trials, and created many of the laws under which war criminals were tried. Memories of his Nuremburg days run to observations on the different philosophies of the Allied occupiers, those who sought vengeance and those who were more interested in rehabilitation of Germany.

No one, least of all Fratcher himself, thinks about the problem of tied-up land as a compelling, headline-grabbing issue. "It's a slow, continuous process. After all, Lord Justice Scrutton made proposals in 1886 that weren't adopted until 1926." But nobody who knows him will be terribly surprised if Fratcher's proposals are adopted much quicker than Scrutton's—who could resist such an eminently reasonable and genial reformer? □

federal grants of more than \$1 million.

Recent reports in Science and Newsweek magazines indicate nationwide scientific and popular interest in Dr. Lodwick's pioneering efforts in diagnosis of bone tumors and, more recently, development of a computer program for automated diagnosis of heart and lung disease.

Rehab Unit Closed Temporarily

A shortage of medical staff in physical medicine and rehabilitation forced the temporary closing of the rehabilitation unit of the Medical Center in July.

The chairman of the department of physical medicine and rehabilitation, Dr. Lester Wolcott, accepted a post as associate dean at Texas Tech University School of Medicine, Lubbock. Two other physicians are resigning to enter private practice.

Ironically, the University is beginning construction on a major addition to McHaney Hall where the unit has been located. Federal grants, funding the construction, require that the McHaney facilities must remain committed to rehabilitation medicine for at least 20 years.

"This should be enough to reassure the staff and patients that the closing is only temporary," Dr. Kenneth Keown, director of the center, says.

Dr. Raymond E. Hogue, was appointed chairman of the department, replacing Wolcott. He formerly was director of physical therapy at the Medical Center.

Outpatient care is continuing and patients requiring inpatient care are being housed in the Medical Center.

nursing

Largest Class Graduates

The largest class, numbering 74, graduated from the baccalaureate program in May '72. Eight students received the degree Master of Science in Nursing. Two of these graduates specialized in Medical-Surgical Nursing, one in Child Psychiatric Nursing and five in Adult Psychiatric Nursing.

New Director Named

Mrs. Dorothy Lueckerath O'Driscoll will be the Director of Senior Nursing this year. Miss Martha Nahikian, who has served as Director for several years, will continue to teach in the area. Mrs. O'Driscoll, who holds a master's degree from Washington University was formerly director of the associate degree program in Nursing at St. Mary's College of O'Fallon.

Miss Muriel Dayhoff, Director of Community Nursing since February 1961, will be on sabbatical during 1972-73. She will be enrolled in the Family Nurse Practitioner Program at the University of Washington, Seattle, and will do special study in curriculum planning for baccalaureate education in nursing.

Mrs. Doris Sauer will serve as director during Miss Dayhoff's leave. Mrs. Mary E. Stilson joined the faculty group in Community Nursing in August. Mrs. Stilson is a graduate of Yale University and is currently completing a masters in nursing at Vanderbilt University.

Theses Gain Recognition For MS '71 Graduates

"Preparing a thesis is a mixture of hard work, excitement, learning and, last but not least, frustration, as anyone who has completed one will tell you," Dr. Alice Major, adviser to master's candidates, says. "It is gratifying, therefore, to be able to say that our graduates are beginning to gain recognition for the quality of their research."

Joyce Brochhaus, MS '71, will present a research paper in September at the convention of the American Psychological Association in Honolulu. The paper is based on her thesis, The Effect of a Training Program of the Empathic Ability of Psychiatric Aids.

The May-June issue of Nursing Research magazine has printed an article co-authored by Sally Feeney, MS '71, and Dr. John C. Marshall entitled Structured Versus Intuitive Intake Interview. The article is based on Sally's thesis.

Judy Taylor, MS '71, presented her thesis, Physiological Monitoring - An Experimental Evaluation, at the convention of the Missouri Nurses Association, to a joint meeting of the Missouri Heart Association and the Missouri Regional Medical Program, and to a workshop focusing on Concerns of the Coronary Care Nurse.

"Judy has the distinction of being the first masters student in our School to involve animals as well as humans in her research," Dr. Major says.

"These theses are clinically oriented and should make a contribution to the body of nursing theory which we are so frequently told is greatly in need of expansion," Dr. Major says.

Five students received masters degrees

in June and August 1971. Nursing students with masters are in great demand as faculty, Dr. Major says.

Alumni to Meet in Fall

Alumni meetings will be held this fall. In Kansas City, the meeting will be 10-11:30 a.m., Oct. 7, at The Medical Center of Independence, 23rd and R. D. Mize Road, Independence. Mrs. Emma Arnold, '49, (telephone 833-3600) and Mrs. B. Marie Kamp, '47, are cohostesses.

A luncheon meeting will be held in St. Louis on Oct. 14. Mrs. Carol Bear, Mrs. Janet Olmsted, and Mrs. Glenda Ehrmann are planning the event.

Community, Psychiatric Nursing To Be Taught Concurrently

Community Nursing and Psychiatric Nursing will be taught concurrently throughout the semester rather than in half-semester blocks.

The longer span of time will allow the student a greater opportunity to develop nursing care plans and observe patient progress, Dean Ruby Potter says.

This change has been considered for several years. Students felt it would be a real advantage and were involved in discussions about the change, Dean Potter says.

The graduate program in Psychiatric Nursing is to be moved to the Columbia Campus. In 1972-73, the second year students will continue at the extended campus in St. Louis. In Columbia, this period will be used to plan for the admission of first year students on the Columbia Campus in fall 1973.

social and community services

Faculty Speaks, Publishes

Solutions to such problems as pollution and inadequate transportation facilities caused by overcrowding are offered in a new book by Hugh Denney, professor of regional and community affairs. He has developed a method for locating growth and service centers.

It works. Using the method described in his book, "Decongesting Metropolitan America: It Can Be Done," Denny predicted AMTRAK before that rail-transit network was formed. His method has been used to locate government service centers for five states, three foreign countries and business groups.

Denney's 30 years of experience in studying the growth and decline of communities are the foundation for the book.

The department of recreation and park administration is completing four studies for the State Inter-Agency Council for Outdoor Recreation. These studies will update the State Comprehensive Outdoor Recreation Plan for Missouri and include Recreation Needs of Inner City Residents in Missouri, Recreation Needs of the Handicapped--the Missouri Situation, Park & Recreation Standards for Missouri, and Trail Needs in Missouri.

Glenn E. Varenhorst, associate professor of regional and community affairs, has written a monograph, A Study Of The Planning Provisions Of The Smaller Constitutional Charter Cities In Missouri, which was published by the department of regional and community affairs and the Extension Division.

Educator's Role Discussed For Community Development

Boyd Faulkner, assistant professor of regional and community affairs, co-ordinated the eighth annual international seminar on the role of educators in community development. The seminar was held in August at the School of Social Work.

The 30 participating educators toured the School of the Ozarks, a Missouri self-help school, and urban development and community schools in St. Louis.

The Campus was chosen as the seminar site because it is one of the few universities in the nation which offers an AM in community development.

The Agency for International Development co-sponsors the seminar which has attracted about 300 students from 40 countries over the years.

Alumni Speak at Institute

The 17th Annual Staff Training Institute for County Welfare Directors was held on Campus in July. The institute was co-sponsored by the Division of Welfare, State Department of Public Health and Welfare, the Extension Division, and the School of Social and Community Services.

Among the subjects covered were "Adult Assistance - The Role of the Social Security Administration" and "The Challenge of Public Welfare in the 1970's."

Alumni appearing on the program included Proctor N. Carter, director, Division of Welfare, State Department of Public Health and Welfare; Tom McLaughlin, coordinator of contractual social services, Division of Welfare,

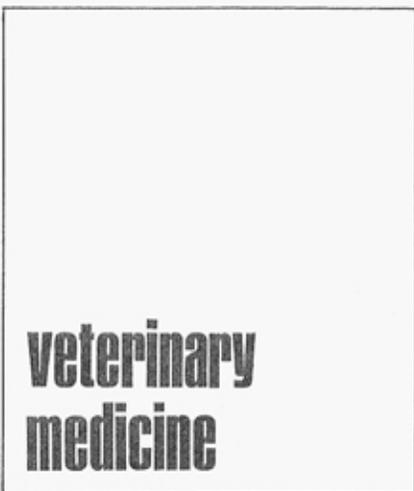
Jefferson City; John F. Pletz, assistant director, Division of Welfare; Ewing Gourley, director, Service Reform Project, Division of Welfare; and Eldo Throckmorton, assistant chief, Bureau of Family and Children's Services, Division of Welfare.

Student Heads Diabetic Camp

James Winkler was director of the Central Missouri Diabetic Children's Camp. Winkler, himself a diabetic and a parks and recreation major at Mizzou, headed a staff of four volunteers.

Dr. Richard Guthrie, a pediatrician at the Medical Center, was in charge of the camp. Dr. Guthrie has just been elected to a three-year term as a director of the American Diabetes Association, comprised of 50 physicians and prominent laymen actively working in the field. On the national level, Dr.

Guthrie, also a diabetic, is chairman of the committee on detection of diabetes in children.



Beagles Help Heart Research

Number 107 was an old beagle. He died last year in an accident at Sinclair Research Farm. An autopsy revealed that 107 had a chronically severe heart condition called atherosclerosis--"hardening of the arteries."

The significance of Number 107 is that he genetically passed on to his puppies this same cardiovascular disease.

For researchers the unique colony of beagles, which numbers about 60, is the first animal model with naturally-occurring cardiovascular disease whose basic metabolism is similar to man's.

The dogs' potential usefulness to heart research can only be speculative at this point and Dr. Middleton is anxious not to exaggerate their value. Other animals have been used in the past, such as pigeons, swine, monkeys and turkeys. But none of these animals have yet been shown to have high levels of cholesterol

in the blood which are genetically passed on to their offspring.

The University received Number 107 and some other beagles with similar characteristics from a Kansas dog food company's research department. The Topeka firm was using the dogs to test nutritional values of its products. They discovered an unnaturally high level of cholesterol--a major contributing factor in atherosclerosis--in the dogs' blood.

Many of the dogs in the beagle colony are showing a naturally-occurring blood cholesterol level as much as 10-times higher than normal beagles. Cholesterol is one of the three major factors--next to smoking and high blood pressure--which contribute to heart attack. It is a glistening white fat essential to the body. But according to the American Heart Association, excessive levels increase the chances of heart attack several times.

Dr. Middleton emphasized that the farm is strictly controlled in its use of animal models by federal laws governing humane treatment of animals. "We are in the process of building a large dog facility which will allow the dogs space to run and live normal lives," he said.

Sinclair Farm's unique beagles will provide the first opportunity scientists have had to examine an animal model with naturally-occurring high blood cholesterol and the resulting tendency to have heart trouble.

How Paquin St. Got Its Name

Is it Pacquin St. or Paquin St. ? The street signs and businesses spelled it both ways. Research by the Columbia Daily Tribune, however, revealed that the street is named after a once-famous veterinarian, Dr. Paul Paquin, a University of Missouri professor from 1884 to 1891 and the first State Veterinarian in Missouri.

Aaron H. Groth, in his book, "Veterinary Medicine at the University of Missouri," said that although Dr. Paquin's later career is obscure, it is certain that the Columbia street is named after him. A Columbia Missourian article in 1912 listed Paquin as the namesake for the street.

Paquin was the first full-time veterinarian ever appointed to the Campus. He taught several courses. He received his MD degree from the University of Missouri in 1887. Former secretary to the Missouri Board of Health and member of the American Medical Association, he was listed in "Who's Who in America."

Paquin did research on several diseases prevalent during his day, including Texas fever. In 1886, he traveled to Europe and worked in the laboratory of Louis Pasteur.

After fighting for years to find a cure for tubercular meningitis, he contracted the disease and died at age 56 in Kansas City where he was director of public health.

Dogs Have Hay Fever, Too



Dr. George G. Doering, associate professor of medicine and surgery at the Veterinary School, examines a dog who may be allergic.

"Foot lickers, face rubbers and armpit scratchers" are dogs with allergies and skin problems similar to man's. Dogs suffer seasonal allergies to various pollens the same as their masters. Veterinarians estimate that 10 to 15 percent of all dogs, the same percentage as in the human population, are allergic types.

Dr. George G. Doering, associate professor of veterinary medicine and surgery, explains the difficulty in diagnosing atopy, a hypersensitive state which includes pollen, dust, and mold allergies, in dogs. A human with hay-fever will have eye and nose irritation. His problem can be diagnosed through skin tests. A dog with atopic dermatitis is a foot licker, face rubber or an armpit scratcher whose problem can't always be accurately diagnosed with a skin test.

Dr. Doering, a veterinary dermatologist, treats dogs brought to the Veterinary School's Hospital Clinic. Weekly antigen injections are about 75 percent effective.

Cortisone treatment relieves the animal's itching during the allergic season but does not relieve the dog's specific allergy. "Antihistamines, often used to counteract human allergies, offer little help to the dog," Dr. Doering says, "though the reason is not completely understood by scientists."

Parasites also are a dermatologic problem to dogs. All dogs can have fleas, and while some are covered with the mites and display no serious reaction, others are extremely allergic. Dr. Doering says the allergic condition

is not from the flea itself but from flea saliva.

Canine sarcoptic mange is a condition produced by a microscopic parasite found in dogs. The parasite burrows into a dog's epidermis to cause itching and the condition is often confused with hay-fever type allergies. Diagnosis is made by skin-scraping and the most frequent treatment is dipping the animal in insecticide.

Demodectic mange is much more difficult to treat and is incurable in some cases. Signs of the problem range from redness of the skin, swelling and loss of hair to skin inflammation.

"This disorder has more individual treatments than any other skin problem in dogs. Veterinarians recommend everything from hanging a clove of garlic around the animal's neck to letting the animal swim in the ocean."

extension

Adult Education Groups Meet

Members of two major adult education organizations held a joint state conference in June in Columbia.

The Missouri Adult Education Association (MAEA) and the Missouri Association for Public Continuing and Adult Education (MoAPCAE) met, sponsored by the Extension Division.

State and national leaders discussed adult education from the viewpoints of public schools and colleges, education for adult education administrators, programs for reading, drug education, sensitivity training for teachers and coalitions of adult education organizations.

Lee Named Best Writer

Richard L. Lee, director of Extension Information, Columbia Campus, was honored as the best writer in the national journal of the American Association of Agricultural College Editors. The award was announced at the professional organization's 56th annual convention in July at West Virginia University, Morgantown.

Lee's article, "Communicating with Disadvantaged Farmers," was judged the best printed in 1971-1972 in the technical journal, ACE Quarterly. The article summarized Lee's observation on how to get helpful information to small farmers, both through the mass media and other methods. It was based on his extensive study of how a group of farmers in Missouri obtain information they use in their farming operations. Lee conducted the study as part of his work in obtaining a PhD degree from the University of Iowa.

On Campus, Lee directs information activities of the College of Agriculture and Extension Division, aimed at getting useful information to Missouri residents. This involves preparing all types of materials including publications, news releases, radio and television programs, slide presentations, and exhibits.

AAACE is a national organization of more than 600 communications specialists in colleges of agriculture, the U. S. Department of Agriculture, and private industry.

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