

# MISSOURI ALUMNUS

NOVEMBER-DECEMBER 1970

## GENERAL/ARTS SECTION

### Psychology Clinic Trains Post Grads

A new psychology clinic to train clinical psychology graduate students opened this September in McAlester Hall.

Director of the clinic Dr. Joseph Doster says, "Our primary orientation is to the community itself, but our services will also be available to students."

Some 15 to 20 graduate students, supervised by 10 faculty members, are offering psychological assessment and consulting individual psychotherapy, family and marital counseling, and evaluation and treatment of childhood and adolescent behavioral problems.

The primary goal of the new clinic, according to Doster, is the training of graduate students: "Our belief is that good service can occur as a result of good training."

Nominal fees adjusted to individual incomes are charged for services to help in the maintenance of clinic facilities and acquiring equipment.

### 5 Playing Fields Expand Intramurals

By easing the problem of overcrowded classrooms on the Columbia campus, another problem was created. The Mathematical Sciences and the Men's Swimming Pool buildings encroached on physical education grounds.

Dean Elmer Kiehl of the College of Agriculture offered new playing fields in an area on temporary loan from the College.

According to Dr. Ralph Stewart, associate professor of physical education, the new area is on the west bank of Hinkson Creek at the eastern extremity of the Agricultural Research Park. Projected ex-

pansion of the Agricultural Research Park will permit use of the grounds for intramurals for at least five years.

Emmett Klinkerman, Columbia campus business officer, said, "During the summer months five 100 x 40 yard fields were graded to offer students an area for touch football, softball and similar activities in the intramural program."

Because of heavy rains, Klinkerman said use was not made of the new fields during the fall season. He predicts that the fields first use will be during the spring sports season.

The intramural sports program extends from September through May. Last year, 1345 teams played 2543 matches involving 10,819 men. The new playing fields will permit competition only during the day as no lighting is planned.

### Ecology Study Has Additional Revenue

Two ecology programs have received financial boosts recently on the Columbia campus.

A \$52,000 grant to study the effect of heated water on ecological processes within the Thomas Hill Reservoir, northwest of Moberly, will be used by two members of the zoology faculty.

The three-year study for the Missouri Co-operative Fishery Unit is to be directed by Arthur Witt Jr., associate professor of zoology, and Robert S. Campbell, professor of zoology.

The study will be on growth and reproduction of fish, growth of bottom organisms and culturing catfish in floating cages. A related study is of the water chemistry of the lake, the effect of inflowing acid mine water, primary production and the growth of attached algae.

The funds were allocated by

the United States Office of Water Resources Research to the Water Resources Research Center.

Two University doctoral students in water pollution control have also received funds to continue their research.

Michael J. Atherton has received a \$6600 grant and Dennis M. Sievers a \$5600 grant.

The money was provided by the Federal Water Quality Control Administration of the U.S. Department of the Interior.

### INGAA Has New Award

A new \$1000 award for excellence in business and financial journalism will be given to a reporter for a business-trade publication.

Five \$1000 awards are currently given annually to weekly newspapers, small and large daily newspapers and to generally circulated magazines. The new category for awards makes about 3000 business publications eligible for the national writing competition.

The awards are made possible by a grant from the Independent Natural Gas Association of America (INGAA). The purpose is to encourage distinguished writing in the field of business journalism and to show recognition to business writers for excellence in reporting. Writers for business publications will become eligible for the 1971 competition.

The INGAA business journalism awards, which began in 1964, are among the most distinguished and financially rewarding of the many awards given to journalists. INGAA also offers a number of scholarships to college students for pursuit of careers in business journalism, in a program jointly administered by the Schools of

Business and Public Administration and Journalism on the Columbia campus.

### Top Cadet Chosen

A University law student was named the outstanding cadet among some 2800 attending the 1970 advanced Army ROTC summer camp.

Larry V. Parman competed with ROTC students from some 64 universities and colleges during the camp at Ft. Riley, Kan.

As the top cadet, Parman and the next four ranking cadets will receive Savings Bonds worth \$600 and Army ROTC leadership citations signed by the army chief of staff during a fall visit to the Pentagon.

Parman received a BS PA in 1970. He has been president of Kappa Alpha social fraternity and a member of Pi Omicron Sigma leadership honorary, Phi Delta Phi legal fraternity and Mystical Seven. He is the son of Mr. and Mrs. Vance Parman of Albany and lives with his wife, Darlene, on Route 5 in Columbia.

### Placement Eases Budgetary Strain

In these times of tight money in higher education, the Columbia campus finds it can ease its budgetary strains through advanced placement. Entering freshmen may take examination for credit applicable toward graduation.

Through this program, instituted in 1965, faculty can be reduced numerically in those areas where there are fewer students. Less demand, time-wise, is made on the classrooms.

Currently, freshmen have two methods of gaining additional credit hours — 30 hours being the maximum for each

student.

The most successful has been the Freshman Placement Tests of the Missouri Colleges Testing Program (MCTP). Through the statewide examinations each spring, potential freshmen can gain credit in college algebra or honors English.

Credit in algebra is based directly on the placement test results. If the successful student is not a math major, he probably will not have to take another college mathematics course.

If a student scores well in English on the exams, the freshman may take the honors English course for three hours. He then may gain six hours of credit for the three hour course if he passes with a grade of C or better.

A second method is based on examinations constructed by Columbia campus academic advisors. The tests cover several basic freshman courses, and most are administered by the Testing and Counseling Service.

This system has proved feasible thus far. During the 1969-70 academic year, 1845 students each gained three hours' credit in English and math. This is 5535 credit hours that did not have to be taught. It is estimated that advanced placement saved \$53,000 last year.

## Challenge Provided In Honors College

"It's a good, sometimes rough awakening to what college is about. It's the best way to get an idea of how college differs from high school. You're challenged, you learn to think."

This is how a University senior described her three previous years in the Honors College program.

Although the Honors College is centered in the College of Arts and Science, all students on the Columbia campus who meet the scholastic standards can enroll. Twenty departments in the University offer special honors programs.

Students are eligible for honors courses if they ranked in the upper 15 per cent of their high school class and their scores on the University's freshman placement tests indicate superior scholastic ability. After the first semester, the students must maintain a B

average to be eligible.

Dr. William Bondeson, director of the College, hopes that this type of course will ultimately be offered to all students at Mizzou.

These courses, which allow students to learn more without so much emphasis on grade competition, should be available to any interested student, he feels.

Honors courses offer more individual attention through smaller classes, averaging from 10 to 15 students, a class size rarely encountered in regular courses.

According to the senior now in her final year of the program, "You're treated like you know something. The teachers, for the most part, aren't competing against students as they seem to do in some other courses. Also, they are willing to take criticism."

## Advisory Committee Selects Dr. Hobbs

Members of government committees are often selected from the teaching fields. Among the most recent appointees on the Columbia campus is Dr. Daryl Hobbs, past chairman of the sociology department.

The associate professor of sociology has been appointed to the advisory committee on research to the U.S. Department of Agriculture, division of biology and agriculture.

As a member of this highly prestigious committee, Hobbs will advise the agriculture department on matters directly concerning its past and future research activities.

## New Faculty Learn Teaching Methods

New freshmen are not the only ones who face unexpected problems in college classrooms every fall. Many new young teachers also find themselves in uncomfortable situations because they simply have little or no experience with college teaching techniques.

A summer program at the Columbia campus was designed to forestall some of the problems for young faculty and graduate student instructors.

This Symposia on Undergraduate Learning and Teaching was the initial step in a campus-wide effort to prepare new instructors for teaching respon-

sibilities.

The program consisted of three different sessions for three groups. The first deals with the natural and physical sciences and mathematics; the second with social science; and the third with humanities.

The groups (limited to 50 persons) met on Thursday and Friday afternoons with panels of experienced faculty in the specific group area.

Sessions usually had four panels covering the following questions: elements of effective college teaching, the psychology of learning, the professional role and responsibilities of the college teacher and professional preparation for college teaching.

The aim of the program was to create an on-going series of seminars devoted to preparing teaching assistants and young faculty members for future teaching, to encourage professional responsibility, to show campus-wide concern about the quality of undergraduate teaching and to consider ways to evaluate and reward outstanding teachers.

The program also attempted to introduce the new teachers to technological resources on the campus. They visited the Office of Instructional Television and Educational Research and Development Laboratory in the School of Medicine.

"Universities tend to demand excellence in scholarship and research but frequently tolerate less than mediocrity in teaching," says Dr. Edgar R. Thomas, who headed the program. "One of our greatest problems is to change this concept and reward great teachers as well as great researchers."

If the desire is expressed, the provost's office hopes to provide opportunities for a series of conferences, seminars or informal sessions with experienced, distinguished colleagues and others to help provide the needed professional experience.

The outcome may be the development of outstanding, sensitive teachers much earlier in their careers than is usually the case.

## Offer Free Exhibits

There are various tourists attractions offered by some University departments. They differ from the commercial variety of sightseeing, however, because

on the Columbia campus such attractions are offered free of charge.

The University department of geology's collection of fossils, rocks and minerals, renovated this summer by a graduate student in geology, is open to the public in the Geology Building. Some 30 display cases may be viewed from 8 a.m. to 5 p.m. daily and from 8 a.m. to noon on Saturdays.

In the fourth floor of the new Physics Building the astronomy department offers a free look at the universe through its \$12,000 telescope from 8 to 10:30 p.m. every Friday. A graduate assistant is present at all sessions to operate the telescope and answer questions. The telescope magnifies the images of planets and stars so the observer sees them as he would be looking out the port-hole of a space ship millions of miles from earth.

## 2 Submit Articles

The 1970 edition of the *Encyclopedia Britannica* contains two contributions from members of the Columbia campus faculty.

Dr. Stanley N. Davis, professor of geology, was the author of an article on groundwater. Professor of biochemistry Thomas D. Luckey's article concerns germfree life.

## Independent Study Has High Enrollment

Nearly 12,000 students are enrolled in the University yet many of these students never set foot inside a classroom.

They are enrolled in the Independent Study Program. The University, the sixth largest center of independent study in the United States, offers 195 college courses and 45 high school courses by correspondence.

Most of the students are from Missouri, although many come from such places as Brazil, Fiji Islands, Spain, Venezuela, New Zealand and Korea.

Independent Study offers two main advantages. The cost is \$17 per semester unit of college courses, regardless of whether the student is a Missouri resident, and \$20 for each one-half unit of high school course.

Another advantage is the

ability to enroll at anytime and to work at an individual pace. Students are given one year to complete their course. They may have two six-month extensions if they need more time.

Some one hundred instructors are involved in the Independent Study Program. They personally grade the assignments and make suggestions to students. There are usually 20 to 24 lessons that the student sends back to the University for grading, plus a mid-term and a final.

Thirty hours of correspondence courses may be applied toward a bachelor's degree. A maximum of eight may be taken toward a master's degree.

## Grant Aids 4 Projects

Medical diagnosis might be made simpler with the aid of a computer to read X-rays if a team of University of Missouri-Columbia scientists succeeds three years from now.

A program to develop a computer system that might reduce human error has been funded by a \$385,639 grant from the National Institute of General Medical Sciences. In the next three years the institute will contribute more than \$1 million for studies to help radiologists reduce their work load.

The research by engineering and radiology faculty members is directed by Dr. Gwilym S. Lodwick, chairman of the Medical Center radiology department and professor of biomedical engineering. Specialists from a variety of scientific fields — electrical, industrial and bioengineering, radiology, computer sciences and psychology — also are involved.

Four interrelated projects, coordinated by Dr. Donald Manson, assistant professor in radiological science, will seek to develop an automated computer system that will diagnose patients quickly, propose remedies in less complex cases and supply information to physicians who have little experience in treating rare diseases.

Other applications of the computer may be to reduce visual errors by radiologists who might check as many as 1000 X-rays daily and to interpret radiant images transmitted from nearby communities.

Radiant images are images

produced by a point source such as an X-ray, but also may result from the operation of a centigram, a device used in the diagnosis of cancer.

## Name New Director

The newly-appointed director of educational resources for the School of Veterinary Medicine, Dr. Roger E. Brown, will also continue his duties in medicine and surgery and as an extension specialist.

Brown will coordinate the activities of a medical artist and photographer and assist faculty in revising existing educational materials, creating new multi-media programs and selecting instructional methods for revised curriculum.

Before joining the veterinary staff in 1969, Brown was assistant director of space utilization at Michigan State University. He received his DVM and MS degrees from MSU, and completed his PhD at Purdue University.

## Film Class Popular

Interest in films has reached a new peak on the Columbia campus. This enthusiasm is not of the Friday and Saturday night date variety, however.

Enrollment in "Language and Literature of Film," taught by Robert L. Dyer, instructor in English, is at a third-semester record of 285 students. When the course was first offered in the fall of 1969, some 180 students were enrolled.

"A lot more students are interested in making films," Dyer says, "wanting to know why there aren't more film courses, asking my advice on film books and so on. Every week in my course 25 or 30 people stay after the film to discuss it with me and ask questions."

The class is intended to be a survey course of history of film, its language and techniques. His course traces the history of film-making from its earliest beginnings to the present.

Dyer values the art of film-making because "it's a difficult process. You get into music, art, drama, and writing as well as photography." Thus, Dyer feels many creative and artistic talents are combined in the production of a single film.

This interest in film, he says, is widespread: "People don't just want entertainment any-

more, they want a message. Movies now have a didactic appeal. Students are now beginning to look at message films as entertainment."

Although the Columbia campus film department is still quite small compared with such universities as Kansas, Iowa and Michigan, the interest of students here in film art seems to be increasing and Dyer ultimately hopes to expand the film instruction at Columbia.

## Student, Prof Go On Rome Expedition

A University professor and a student spent most of August taking part in an archaeological expedition to excavate Roman ruins with Italian experts and scholars from other American universities.

Dr. Anna Marguerite McCann, assistant professor of archaeology and also associated with the American Academy in Rome, and Dennis Crull, a senior in the College of Engineering, had specific duties during the excavation. Professor McCann was the director of the expedition and in charge of photography. Crull was a diver, engineer, surveyor and in charge of equipment.

The expedition was to study and map Populonia, an ancient Etruscan harbor in Italy, and to obtain drawings and material from Cosa, a Roman harbor founded about 273 B.C.

The excavations were financed by a private donor and the University's Assistant Professors' Research Fund. A grant to the University's department of art history and archaeology from the Ford Foundation financed the participation of other American university students.

## TV Classes Popular

Many University students are watching television during their class periods. It's not the kind of programing, however, that parents would object to.

More than 200 courses contain at least a few taped segments, while 15 are taught via television more than 50 per cent of the time.

Columbia Campus instructional television, known as ITV, facilities are as complete as any medium-sized television station — minus the transmitter. Programs are sent to the classrooms from Jesse Hall across the coaxial cables.

The studio contains two black and white cameras and other electronic equipment. In addition, ITV has mobile facilities which make it possible to bring TV to areas not usually served and 43 "Sub-systems" which consist of a portable video tape recorder, camera and TV monitor. These sub-systems are used primarily for practice teacher evaluations and to enable large groups of students to view minute laboratory experiments.

ITV maintains a video tape library valued at more than \$1 million. Some of the irreplaceable tapes were recorded by professors who are either no longer living or no longer at the University. These tapes are stored in a fireproof vault.

The taped programs are primarily courses in agricultural economics, military science, civil engineering, copyediting, education, literature, general psychology, international relations, physical education, psychology of personality, radio and TV in modern society, great speakers, public speaking, instructional and educational television and other media.

## Sophomore Among 14 In Pilot Program

The Columbia campus is one of 14 colleges in the United States participating in a pilot study program seeking a new approach to man's future.

Director of international studies at the University, Dr. Edmund A. Ford, said a University sophomore, Miss Cheryl Jean Randle from Overland, Mo., has been selected to participate in this program. She was selected on the basis of creativity, social flexibility and academic competence.

During the early part of last summer, she did independent preparatory reading. Later in the summer she met with 15 college students in a one-week exploratory conference to design and conduct cross-national investigations of "Nationalism" in the U.S., British Isles and an English-speaking West African nation.

This fall, she is preparing for overseas work and investigating some aspects of American nationalism.

She will spend the spring semester in England and the 1971 summer semester in Ghana doing field work.

## Students Restore Historical Site

Several University archaeology students and a professor are engaged in the restoration of a historical site.

Dr. Robert T. Bray, assistant professor of anthropology and director of the Archaeological Research Center and Hamilton Field School, is directing the research at Nauvoo, Ill., leading to restoration of the Joseph Smith Historical Center.

The study is financed by a grant from the Reorganized Church of Jesus Christ of Latter Day Saints in Independence and may continue indefinitely until the historic center is restored. Smith was founder of the church and of the city of Nauvoo to which the congregation moved in 1839 from Independence.

Bray said artifacts have been sparse, as expected, in excavations of the Joseph Smith stable, but it has been determined the two-story building was 65 by 45 feet and built of limestone and brick.

With field work completed, Bray says a laboratory analysis and preparation of a report will be completed this winter.

## Lunar Study Made By Geology Prof

A recently honored professor of geology at the Columbia campus began work in July on a sample of lunar surface material sent from the National Aeronautics and Space Administration.

Dr. Walter D. Keller, who retired this last year from teaching, received five grams of moon dust from the Apollo 11 mission. Previous samples from Apollo flights were investigated on the Columbia campus to determine the weathering effects of the earth's atmosphere on lunar materials.

The samples and funds for Keller's research are made available through a grant from NASA.

Keller was honored this summer with a resolution passed by the Missouri House of Representatives following his retirement. He has won the Neil A. Miner Award of the National Association of Geology Teachers and the Distinguished Faculty Award of the Alumni Association.

The professor emeritus also

has been selected to appear in the 1970 edition of Outstanding Educators of America. He was one of 5000 of the nation's educators selected on the basis of civic and professional achievement.

## Counseling Service Provided to Campus

For the student away from home and family the first time, or the student upset over studies or a personal problem, there is a place to find help on the Columbia campus.

In order to help students achieve maximum benefit from their college experience, the University provides a counseling service. Counseling consists primarily of discussions between the student and a counselor and may include testing to determine the student's intelligence, aptitudes, vocational interests, and personality characteristics.

The offices, however, provide much more than testing in the usual sense. Two of the newest programs, weight control and the micro-labs, do not deal with paper and statistics.

The weight control program is being conducted by Dr. Kenneth Brown, associate professor of psychology, and two PhD candidates in clinical psychology. Their objective is to give moral support to overweight persons.

They feel many persons eat not because they are hungry but because they have emotional problems. Their hope is to help replace compulsive eating with more constructive behavior by helping to resolve personal problems.

Weight problems are attacked two ways. First, hypnosis is used to change eating habits. It is hoped the size of portions, bite size and eating rate will be reduced and taste in kinds of food will be changed. Finally, discussion is conducted to determine why volunteers are overweight.

Another Testing and Counseling service, the micro-labs, helps students to deal with the impersonal campus atmosphere by knowing themselves better and understanding others.

The micro-labs consist of groups of 15 students directed by a trainer. Group members communicate their feelings by various exercises. The sharing exercise, where people talk

about their feelings in the group situation, helps to break the ice. Through nonverbal exercises, persons learn to read facial expressions.

Next, the group goes on to a series of verbal exercises to make each member more sensitive to his own feelings and what others think about him.

Finally, group members learn to trust each other by doing the "trust walk" exercise. A person closes his eyes and someone leads him around the room. The effect is a dependence on and trust for the leader.

The micro-labs have been established to deal with normal college students. Both the weight-control program and the labs are compatible with the goals of the Testing and Counseling Service: to help in vocational, academic and personal aspects of the student's college career.

## Sears Gets Degree

A German University has selected University professor of genetics Dr. Ernest R. Sears for an honorary degree.

The University of Goettingen chose Sears to receive an honorary doctor of science degree for his work in wheat genetics. The degree was conferred in Germany during the summer.

Sears, a member of the University faculty since 1936, is a research geneticist for the U.S. Department of Agriculture.

## Authority Donates Personal Library

Dr. William W. Biddle, noted authority on community development, is giving his personal library of books, monographs and studies in the field to the department of regional and community affairs at the University of Missouri-Columbia.

The department in the School of Social and Community Services marked the occasion with a buffet luncheon and reception October 9.

Biddle has devoted a lifetime to teaching and consulting in the field of community development. He attended Union Theological Seminary and Columbia University, New York City, where he received a doctoral degree in social and educational psychology. He has worked with numerous federal, social, religious and international agencies.

## Professor Conducts Squirrel Research

A sense of humanitarianism and the love of nature are prominent factors that brought zoologist Dr. Christopher Smith a \$30,000 National Science Foundation grant and a house full of squirrels on Watson Place in Columbia.

A sign on the door announces "Smith's Squirrel House." Inside 17 wire cages are squirrels used by Smith in his research. The animals' names, like "Hoppity" and "Bashful" are scrawled on the cage doors, and change from time to time at the whim of Smith's children.

Smith is engaged in this type of study because he feels the squirrel is a convenient organism for answering certain questions ecologists and ethologists ask, such as: What controls the numbers of individuals within a species, how similar can species be and live together in the same area and how does social behavior relate to the ecology of an animal.

At the end of the first two years of discovering some of these answers, Smith is now asking many more questions.

The animals he studies are the grey squirrel and the fox squirrel. One of his favorite observation points is the A. L. Gustin Golf Course where these two species live together and utilize the same food supply.

Smith has found that both types of squirrels are equally efficient in digesting available food, mostly acorns, hickory nuts and mushrooms.

The difference appears to be in the habitats they're adapted to. The bigger fox squirrel usually lives in clear habitats while the grey squirrel prefers dense river bottoms or places with heavy underbrush.

Smith has found that squirrels suit their feeding behavior to the nature of their food. The Canadian squirrel, for example, claims a fixed territory and can amass piles of pine cones in the open because other animals cannot eat them. The grey and fox squirrels hide their food supplies, called "mast," to protect it from turkeys and deer.

With answers to these questions about the structure of nature, Smith feels man will "be better able to form a balanced relationship with natural resources."