

## Extension efforts reviewed

UM extension programs are as valuable to urbanites as they are to people living in rural areas, according to a statewide advisory council report.

Recommendations for the extension function of the four-campus University were made by a 31-member council appointed last

March by President Ratchford to study extension strengths and weaknesses, to determine future program efforts and to suggest changes.

The main weakness of extension in Missouri, the report says, is that it has not created an image of a service available to urban

as well as to rural residents and that local extension councils continue to represent only a small segment of the population.

The report was prepared by Fred Kling, of Albany, Mrs. Alberta Hagerman, of Wayland, and Ken Christgen, Jr., of St. Joseph.

## Briefly

### Access draft studied

A draft of new UM guidelines on student access to educational records is under study by members of the U-wide Committee on the Confidentiality of Student Records and campus admissions officials, according to Dr. A. G. Unklesbay, vice-president for administration.

The draft was prepared following modifications in the amendment to the Family Education Rights and Privacy Act of 1974.

The guidelines are expected to be in final form within a few weeks, Dr. Unklesbay said.

### 'Open Meeting'

UMKC's student body president, James R. Jacob, and Irving Fane, curator, will join UM President C. Brice Ratchford in answering questions Sunday on the radio program "Open Meeting."

The live, call-in program is broadcast from 5 to 6 p.m. on the University's FM stations (KBIA in Columbia—91.3; KCUR in Kansas City—89.3; KUMR in Rolla—88.5; KWMU in St. Louis—90.7).

Listeners are invited to call collect with questions about the University. The number to call is 816/276-1551. Any question which is not answered during the program because of time limitations will be answered by mail provided the caller leaves his name and address.

### Ratchford to testify Feb. 11

President Ratchford, who is to appear Feb. 11 before the Senate Appropriations Committee, says he will take that opportunity to put an end to speculation that UM has an \$8.3-million revenue "bonanza" this year.

## Policy on hiring clarified

Questions about implementation of the hiring freeze agreed to Jan. 11 by the University cabinet have been collected from the campuses by *Spectrum* and passed along to various UM officials. Following are the questions and the officials' responses:

### How long will the freeze last?

At least until revenue expectations for fiscal 1975-76 are reasonably clear, and perhaps into the next fiscal year.

### How much of a budgetary saving is anticipated? How many positions are involved?

There is no dollar goal. The effort is to improve financial flexibility as much as possible. No particular number of positions is targeted.

### What about people in line for promotions? Will they receive raises?

Promotions are to occur normally. If the promotion carries a salary or wage adjustment and the unit has the funds, it will be made.

### What about offers of employment made to persons before the freeze?

Bona fide offers should be honored.

### What is an essential position?

The employing unit must make that determination and justify it to the chancellor.

### Does the freeze affect positions supported by grant money?

Grant-funded positions may be filled.

### Will a hiring unit be able to maintain unfilled positions and employ when the freeze is over?

Yes, to the extent that the positions are necessary.

### Are high-level positions such as chancellors, provosts and deans included?

Yes. Each case is considered on its own. A specific case: the UMSL chancellorship will be filled.

### Are University-wide positions included in the freeze?

Yes. Appeals to fill vacancies will be made to the president.

### Are fellowships, scholarships and teaching assistantships affected?

Those funded by state-appropriated moneys are affected. Teaching assistant appointments must be cleared through the chancellor.

### Are transfers affected?

Transfers of personnel within the University will continue normally.

### Will personnel offices continue to post vacancy lists?

Yes — those positions which are to be filled.

### What about summer programs? What about extension and short-course employment?

Again, each situation should be decided on its merit. If a program is considered essential and positions to mount it are justified to the chancellor or the vice-president for extension, personnel may be employed.

### What about positions vacated because a faculty

### member is not granted tenure and leaves? What about positions open because an employee is dismissed?

Positions open as the result of terminations initiated by the University may be filled. A case in point would be a teaching position open because a faculty member, having failed to receive tenure, leaves the University.

### What about filling the position of someone on maternity leave? And is the person taken back at the end of the leave?

Filling temporary vacancies must be justified in the same way as filling other vacancies. Is it essential, or could the work be shared or shifted or reduced temporarily? Normal procedures continue to apply on leaves of absence.

### Without University-wide guidelines, isn't the freeze likely to be administered inequitably on the four campuses?

The chancellors agreed to the need for improved financial flexibility. They are responsible for administering the program in their best judgment. Any positions vacant now or which become vacant and are filled not only must be approved by the chancellors but also must be reported to the central administration. There is continuing communication among the chancellors and with the central administration.

## Patent applications multiply

The University Committee on Patents and Copyrights reports that 14 applications for U.S. patents have been or are being processed on behalf of UM faculty in the first half of the current fiscal year. This is twice as many as last year and seven times the total of three years ago.

The University's patent regulations, revised into workable form in mid-1971, specifically allow and encourage industrial and commercial participation in University patents. Numerous companies, therefore, hoping for eventual shared patent rights with the University, have shown interest in faculty projects involving patent pursuits.

These side benefits of the University's patent policy are thus making indirect payoffs for University research. Hoping to stimulate further interest and understanding among the faculty about the patent regulations, the patent committee plans sessions on each of the campuses this spring.

A booklet discussing the University's patent regulations is available from the campus research administration offices. Faculty may also contact any of the following campus representatives on the committee:

Columbia—Charles P. Merilan, chairman, professor of dairy husbandry; Doil Felts, associate professor of extension education; John C. Lysen, professor of mechanical and aerospace engineering; Joye Patterson, assistant professor of journalism; Douglass Tate, professor of counseling and personnel services.

Kansas City—Jack Steward, assistant dean of the dental school; Gary Nahrstedt, professor of education.

Rolla—George Schowengerdt, assistant professor of psychology; Robert V. Wolf, professor of metallurgical engineering.

St. Louis—Dwight Williams, assistant professor of speech and English; Monroe Strickberger, professor of biology.

U-wide—Lynn Martin, vice-chairman, director of intercampus instruction; Ralph Franklin, secretary, director of grants and contracts; Paul Keenan, ex officio, assistant to the vice-president for research; James N. Newberry, ex officio, counsel.

## Economic seminar

UM and Gov. Christopher S. Bond are serving as co-hosts of the Missouri Bicentennial Economic Seminar at the Lodge of the Four Seasons, Lake Ozark, Mo.

The two-day seminar, which began yesterday, is being attended by representatives of government, business and industry from throughout the state. The seminar theme is "The Management of Economic Change—Missouri in the '70s."

Among those participating are Dr. Jack D. Heysinger, dean, UMKC School of Administration; Dr. Donald Driemeir, acting dean, UMSL School of Business Administration; Dr. Bernard R. Sarchet, chairman, UMR department of engineering management; and Dr. Robert W. Paterson, dean, UMC College of Business and Public Administration.

## Truman scholarships

Among the bills passed in the final days of the 93rd Congress and later signed by President Ford is one authorizing public service scholarships as a memorial to the late President Harry Truman.

The four-year scholarships, designated for either graduate or undergraduate students preparing for public service careers, will cover tuition, books, room and board up to \$5,000 a year.

The scholarships will be financed by the interest on a \$30-million endowment to be set up by the Treasury Department.

## Ruling on control of funds

The New Mexico Supreme Court has ruled in effect that neither the state legislature nor any official of the executive branch can tell state colleges and universities how to spend—or whether to spend—funds received from federal or other nonstate sources.

The decision upheld Gov. Bruce King's line-item veto, in an appropriations bill, of language that would have required state approval of expenditures of funds not appropriated by the state legislature.

Dr. M. M. Chambers, commenting on the case in *Grapevine*, calls it a

"landmark decision" which, if "... made known and studied by university presidents, statewide coordinating board members and staffs, and state fiscal officers, ... might do something to ameliorate the more or less seething relations between the state university camps

and the state government camps. ... It would be helpful if all concerned would understand that a public university or college is an agency empowered to receive and hold charitable gifts and endowment funds and apply the income from such sources to its general educational purposes. ..."

## Committee hears Ratchford

President Ratchford has reiterated before the Missouri House Appropriations Committee that "the University has not asked for a school of optometry" and that it "needs a clear indication as quickly as possible whether the state wants and will finance" the school.

In his testimony before the committee, which is holding hearings on the emergency appropriations bill, Ratchford summarized information previously supplied to the General Assembly, Gov. Christopher Bond and the Coordinating Board for Higher Education.

## Freshmen surveyed

Entering freshmen are turning away from the physical sciences, engineering and mathematics in favor of the applied sciences and health professions, according to a nationwide survey by the University of California at Los Angeles.

The study, sponsored jointly by UCLA and the American Council on Education, has been conducted annually for the last nine years.

Among the findings:

- The percentage of prospective nurses (5.1 per cent) has more than doubled since 1966.

- While 8.9 per cent of the 1966 freshmen said they planned to go into engineering, only 4.7 indicated that preference in 1974.

- The percentage of 1974 freshmen interested in health professions was 8.9, up from 4.7 in 1966.

- Only 7.7 per cent of those polled said they planned to teach at the elementary or secondary level. In 1966, the first year of the survey, the percentage interested in teaching was 21.7.

- Fewer women are planning to become teachers, while the number apparently headed into such traditionally masculine professions as business, medicine and law is increasing.

- Only 3.9 per cent of freshmen men indicated they planned to enter law. The percentage had increased steadily from 3.9 in 1966 to 4.7 in 1973.

- Some 45.3 per cent feel couples should live together before marriage.

- A huge 91.5 per cent favor job equality for women, but 29.8 per cent believe women's activities should be confined to the home. (The 29.8 per cent, incidentally, represents 39.5 per cent of the men and 19.4 per cent of the women.)

Copies of the survey report, *The American Freshman: National Norms for Fall 1974*, are available for \$4 from Cooperative Institutional Research Program, Graduate School of Education, University of California, Los Angeles, 405 Hilgard Avenue, Los Angeles, Calif. 90024.

## Hidden costs in research

Professor X receives a grant from a state or federal agency. Part of it, however, assigned to "indirect costs," has been removed.

The "disappearance" of some of his money will probably cause him to contemplate the nature of this vaguely titled category. Will the missing funds help build a new field house? Worse yet, will U-wide administration get them?

Neither. Actually, money for indirect research costs is considered campus income and is used for general operating expenses of the campus. The federal government recognizes that any educational institution will incur certain costs in carrying out research operations, but that the costs will not always be directly attributable to any single project or activity. Thus, federal regulations specify that part of any state or federal grant be assigned to indirect costs.

Such indirect costs will include personnel time and the use of equipment at departmental or divisional levels and in research or general administration to handle processing, purchasing, accounting or other activities attributable to research work. The operation and maintenance of the physical plant, use of the library system, building space and equipment all add to university research costs.

**Here's how** the University builds its indirect costs accounts:

The process begins with each campus compiling its total costs for all general expenses and then pinpointing a certain part of the total for research purposes. Campus officials use several methods to arrive at this research figure, including total cost distribution, actual use distribution, salary and wage distribution and others.

The next step is to pool all the campus figures into an indirect research cost for the whole University. This total cost figure is then divided by the total salaries and wages incurred for organized research, which gives an indirect cost rate.

HEW enters the process when it receives data from the University in the form of an indirect cost proposal. The proposal runs to about 100 pages, accompanied by some 200 pages of "working papers." HEW, as the audit agency for federal grants and contracts, then audits the proposal, a task sometimes requiring more than six months. HEW reviews all costs included in the pool, methods of allocation used, support maintained and costs composing the base.

Guided by the findings of the audit, the regional controller negotiates a rate for reimbursing indirect costs to the University. This rate then becomes the accepted basis for research grant and contract budgeting and cost recovery.

**So the amount** removed from Professor X's grant either was established at the time the proposal was written or was negotiated or modified prior to being awarded. All funds received as reimbursement for indirect research costs are allocated to the campuses according to the extent to which they are involved in completing the project.

At the beginning of each fiscal year the total anticipated income from indirect research costs is recorded. That amount is part of the total funds budgeted to various departmental and administrative accounts. Thus, indirect research costs constitute an important part of the campus budgeting and funding process.

Faculty members with further questions about indirect costs are invited to direct their inquiries to their campus research administration office.

## Federal aid studied

Only about 22 per cent of the recipients of federal student aid in fall 1973 were enrolled at state and land-grant universities, although these institutions enroll some 30 per cent of all students in higher education, according to a survey conducted by the

Higher Education Panel of the American Council on Education.

Findings of the survey are summarized in the Jan. 6 issue of *FYI*, the circular of the National Association of State Universities and Land-Grant Colleges.

## Accrediting agencies attacked

A study commissioned by the U.S. Office of Education recommends that "the monopoly power of some accrediting agencies over the eligibility of postsecondary schools for federal benefits should be broken" and that the USOE "should rely less heavily on accreditation and take stronger independent steps to protect students."

The director of the study, Harold Orlans, said his staff concluded that accreditation should not be the only means by which schools gain eligibility, adding that "a new private agency should be established to provide an avenue of eligibility for useful unaccredited schools."

The report says the "common belief that regional accreditation is an assurance of institutional quality or even excellence cannot be sustained. Most unaccredited higher educational institutions have historically been ineligible for accreditation. . . . On any objective test, accredited institutions offer education of widely varied quality ranging from very good to very poor."

The two-volume report, *Private Accreditation and Public Eligibility*, is expected to be available on April 1. Copies may be obtained from ERIC Document Reproduction Service, P.O. Box 190, Arlington, Va. 22210. Paper, \$28.80 (postpaid); microfiche, \$1.23 (postpaid).

## Mail-order master's (act now!)

Shut-ins, moonlighters and misanthropes can earn master's degrees without ever setting foot on a campus, thanks to a new mail-order degree program administered by Dominguez Hills States College, Bishop, Calif.

The program, leading to an M.A. in humanities, includes courses in music, art and philosophy.

## Yale saves (?)

Yale University is using less fuel oil and electricity than it did five years ago, but it is paying more than three times as much for it, according to John F. Embersits, director of university operations.

The total outlay five years ago, he said, was

The UM Board of Curators has named 30 persons to membership in the newly formed University Consulate, according to John Sam Williamson, board president.

"Appointment to the consulate is one of the highest honors the University can give," Williamson said, "to recognize the exceptional past service and support of these distinguished persons."

The membership of the consulate, which is independent and self-supporting, will be increased by 10 each year until a total of 100 is reached.

This year's members:

G. Fred Kling, Jr. — lawyer; former curator and alumni leader.

Dr. Elmer Ellis — president emeritus, UM.

Fred V. Heinkel — president, Missouri Farmers Assn.; former curator.

Oliver B. Ferguson — newspaper publisher; former curator president.

Henry Andrae — lawyer; former president of Cole County chapter of UMC Alumni Assn. and UMC Law School Alumni Assn.

Cullen Coil — lawyer; former president of UMC Alumni Assn.; member of University Alumni Alliance.

B. W. Robinson — asst. commissioner for vocational educ., State Department of Education; former president of UMC Alumni Assn.; member of University Alumni Alliance.

Dutton Brookfield — president, Unitog Co.; director of UM Development Fund; former president of UMC Alumni Assn.; member of University of Kansas City Board of Trustees.

George H. Clay II — president, Federal Reserve Bank of Kansas City; numerous leadership posts in UM Development Fund.

R. Crosby Kemper, Jr. — banker; civic and alumni leader in support of UM; Jefferson Club distinguished fellow.

Arthur Mag — lawyer; former chairman of University of Kansas City Board of Trustees.

Lester A. Milgram — president of Milgram Food Stores; active in UM alumni and development efforts.

John A. Morgan — president, Butler Manufacturing Co.; former chairman of University of Kansas City Board of Trustees.

Miller Nichols — chairman of the board, J. C. Nichols Co.; former chairman of University of Kansas City Board of Trustees.

Elmer F. Pierson — founder and retired chairman of the board, Vendo Co.; member of University of Kansas City Board of Trustees.

Martha Jane Starr (Mrs. John W.) — member of University of Kansas City Board of Trustees; organizer of University Women's Council.

Harold Niedorp — Niedorp Insurance Agency; former president of UMC Alumni Assn.

Robert G. Brady — lawyer; former presiding judge, St. Louis Court of Appeals; former curator president.

Darryl R. Francis — president, Federal Reserve Bank of St. Louis; former president of UMC Alumni Assn.; president of UM Development Fund.

Theodore D. McNeal — president, Board of Police Commissioners; former curator.

Roswell Messing, Jr. — president, World Color Printing Co.; member of UM Development Fund Board of Directors; Jefferson Club distinguished fellow.

James J. Murphy, Sr. — president, The Murphy Co.; former president of UMR Alumni Assn.; member of University Alumni Alliance.

Robert Neill — lawyer; former curator president. T. Hartley Pollock — lawyer; member of UM Development Fund Board of Directors.

Howard L. "Cy" Young — president, American Zinc Sales Co.; member of UM Development Fund Board of Directors; chairman of Jefferson Club trustees.

William H. Billings — judge, 35th Judicial Circuit; former curator president.

John H. Caruthers — retired lawyer; former curator.

William H. Byler — inventor, retired senior vice-president of U.S. Radium Corp.; Jefferson Club distinguished fellow; active alumni leader.

Marvin D. McQueen — advertising executive, Ackerman Advertising Co.; former president of UMC Alumni Assn.; member of UMC Development Council.

Karl F. Hasselmann — retired president and director, Salt Dome Production Co., Houston; former president of UMR Alumni Assn.

# Consulate members appointed

\$2.4 million, while the bill for the 1974-75 school year is expected to be \$8.7 million.

Embersits said that if Yale were still consuming as much energy as it was five years ago, in 1969-70, the cost for this year would be \$9.9 million.



Dr. Flynn prepares to pop one of her child-growth subjects into a machine used to determine the percentage of body fat.

## Guinea pigs lauded

Dr. Margaret Flynn writes notes to "egg on" the faculty guinea pigs participating in her cholesterol research. Recently they received this hortatory letter:

Gentlemen:  
Hang in there! We are grateful to you for:

- Your continued loyalty in support of our egg study.

- Your weight maintenance.

- Your "cooks' " support of our study.

- Your good humor and ingenuity in consumption or non-consumption of the egg.

- Admitting the biologic superiority of the egg — a chicken hatches out of it.

- Your weekly thoughts about publishing a book entitled "A 90-Day Egg Diet" or "A 90-Day Eggless Diet" or "Why Did I Ever Get Involved?"

- Keeping to yourself all those stories about various-sized eggs chasing you in your dreams — until the study is finished.

- Keeping a desk calendar marked "How Many More Days Until I Willingly Give My Blood."

Getting out of bed at 10 p.m. after "What a day!" shouting, "I forgot to eat my egg!" — and dragging into the kitchen to eat the hard-cooked "snack" which turned out to have two yolks and stuck to your esophagus and required a "swig" of "beverage" to dislodge.

## Birch U.

The John Birch Society has announced plans to open a university somewhere in California in 1979.

According to the society's western district governor, Charles Armour, the university will offer degree programs in law, medicine, science, engineering and liberal arts.

## Nutritionist giving eggs a break

An egg a day may or may not keep the cardiologist away.

Males who like eggs but are concerned about recent findings suggesting that eggs raise their cholesterol levels should be interested in a study being conducted by Dr. Margaret Flynn. She is asking 140 male faculty colleagues to eat an egg a day for three months to see what it does to their cholesterol levels.

The egg-centric project is one of several research efforts the UMC nutritionist has under way. Only males whose cholesterol levels have been within normal range for five years are participating. No changes will be made in their diets or life styles. "We just want to see what an egg a day does to a freely living individual," says Dr. Flynn.

Half of her 140 volunteers will eat an egg each day for three months and half will eat no eggs. At the end of the three months their cholesterol levels will be measured. Then the first group will go off eggs and the other will go on. Again, at the end of three months, their cholesterol levels will be measured. "Egg money" for the volunteers, by the way, is coming from the Missouri egg industry, which naturally wants to find out the truth about eggs.

**Why no women?** "Their hormonal systems give them protection against coronary disease until menopause," the nutritionist says, "but after that point their blood cholesterol is competitive with males. The female edge of longer life spans and healthier pre-menopausal hearts may be part of nature's protection for the sex which bears the young," she says.

The egg project is an offshoot of her five-year-old continuing study of the cardiac risk of male faculty members. Some 900 volunteers have their blood and body fat levels monitored regularly. "It's stimulated better health care among male faculty—many have lost weight and increased their exercise while lowering their blood lipids through diet-watching.

"A few cardio-vascular accidents have also occurred. We could almost predict them from medical histories of smoking, obesity, sedentary life and, usually, one or both parents who died of heart disease," Dr. Flynn says.

She has high praise for "the guys" who have thrown themselves enthusiastically into the long-term project. "Many of the guys are amazingly dedicated to their exercise and diet-watching," she says.

**Through** another project, just concluded, Dr. Flynn has developed a set of standard norms for the way children grow, from infancy through adolescence.

"Given a child at a certain age and height, we can now say that his or her body will have a certain percentage each of lean muscle and fat—within a normal range of 1 Standard Deviation."

For a diseased child, the norms will aid in diagnosing how far from normal growth the child may be. In treating an ill child, the norms provide goals against which progress can be measured. For well children, the norms can support a diagnosis of adequate health or show where a child may be on the

borderline and require further tests for hidden health problems.

**An offshoot** of this project has been some studies on the way babies grow. Dr. Flynn and Marjorie Rutledge, a graduate student, found that babies will put on the same amount of lean mass whether breast- or bottle-fed. But the bottle-fed infant puts on more fat—"And the plump child has a tendency to become the plump adolescent and the overweight adult," she says.

Body fat is also added if the infant is started too soon on solid foods. "Three months is plenty early to start solid foods. Feeding cereals to baby doesn't assure a sound night's sleep for the parents.

"Our studies of infant growth showed some cases of mothers' subtle force-feeding formula," she says, in effect forcing fat on the infant. "The mother sees what's left in the bottle and wants the child to consume it. We found the same thing with baby food products: there's nothing wrong with the products; the problems are with the mothers' tendency to overfeed."

Other child growth findings: Boys and girls add lean mass at the same rate during the first 10 years—it's after that that male/female growth patterns diverge. And black children develop at the same rate and in the same manner as white children.

—Margaret Kraeuchi

## Feedback

### What hyperbole?

I am sure Dr. Kimber (*Spectrum*, Jan. 17) had reference to actual \$ savings and not his "love of hyperbole." If you would take the effort to calculate the dollars required to publish this unneeded sheet of paper and if you were really honest in your evaluation you would recommend termination. I have reference to secretarial time, the need (?) for an editor and campus editors and the cost thereof. After all, can't the *Missourian* keep us informed? (Or maybe you consider it a failure!)

J. R. BROWN  
Assoc. Prof. of  
Agronomy  
UMC

*The total annual cost of Spectrum is about \$25,000, all derived through reallocation of existing UIS funds. This figure, which has been provided to the UMC faculty council and anyone else who has inquired, covers all expenses, including the editor's salary. (And the editorial "we," by the way, is purely editorial.)*

*As for the Missourian, you must realize that it is a laboratory newspaper, not an internal communications vehicle for the Columbia campus, much less the entire University.*

The Editor

## Libraries support extension

Thirty-one Missouri colleges and universities are now making their library services available to students enrolled in UM correspondence courses. They are:

Avila, Calvary Bible, Central Missouri State, Columbia, Cottey, Crowder, Culver Stockton, East Central Junior, Evangel, Florissant Valley, Fontbonne, Hannibal-LaGrange, Lindenwood, Longview, Kemper, Maple Woods, Maryville, Mineral Area, Missouri Baptist, Missouri Western State, Moberly, Northeast Missouri State, Notre Dame, Ozark Bible, School of the Ozarks, Southeast Missouri State, Southwest Missouri State, Southwest Baptist, Three Rivers, Trenton Junior and William Woods.

More than 200 college-level and high school courses, both credit and non-credit, are available through University Extension's Center for Independent Study Through Correspondence.

## U. S. aid at peak in 1972

Total federal support to colleges and universities in recent years peaked in fiscal 1972 at \$4.6 billion, according to a report released by the Federal Interagency Committee on Education.

In fiscal 1973, the report shows, support declined to \$4.5 billion, 3.2 per cent less than in the previous year.

The study, which was conducted primarily to determine the amount of federal aid to predominantly black colleges, reports the total for black schools fell from \$257 million in 1972 to \$250 million in 1973, a decline of 2.7 per cent.

## Body of knowledge

Prof. Sarah Short of Syracuse University reports that her students find formulas easier to memorize if they are painted on her legs.

## Program for aged

A new UMMSL extension program designed to assist the aged and to provide educational opportunities for older Missourians is under way following the appointment of Dibby Falconer as director.

A gerontology

specialist, Ms. Falconer will develop training sessions, curriculum and a library of materials relating to the process of aging.

She will assist in coordinating the total University program to provide help for the elderly through the efforts of

extension faculty and staff from UM and Lincoln University and will cooperate with state and local agencies which deal with problems of the aged.

## UMC students direct "big events" traffic as police "cadets"



Robin Spurling, 19, one of 10 UMC police department "cadets," directs traffic in the Hearnes parking lot.

If that campus "cop" seems a little young, chances are he is. The person in uniform and badge may be a student.

Ten undergraduates have joined UMC's police staff as "cadets"—part-time personnel who are not commissioned officers. The cadets perform the nuts-and-bolts chore of police work such as directing traffic in the Hearnes parking lot, and patrolling the auditorium during sports and entertainment events. Occasionally, cadets perform other duties for the UMC police.

The department started the cadet program last summer as a means of increasing available personnel for activities scheduled in the Hearnes building.

"We don't have as many patrolmen as we used to, and we have more special events to handle," says Franklin A. Brown, an administrative assistant who coordinates the program.

Although the police department started hiring "cadets" for a practical reason, the program has paid off with some intangible dividends for the students.

Many of the cadets are now eyeing police work as a vocation. Their part-time job enables them to take a close-up look at the field.

"I know this field really interests me," says Miss Robin Spurling, 19, a sophomore from Moberly. "Getting this experience will help me decide whether I want to go into police work per se, or enter a related field."

"I am going into law enforcement as a vocation, and this program gives me a chance to get some experience," says Wayne Holt, 20, a junior from Buffalo.

"Even those students who don't go into law enforcement will probably benefit from working closely with policemen," Brown says. "A lot of them will be going back to their home towns and getting into

government. Who knows, some of them might run for city council. If every city councilman had this experience, it might be a good thing."

Starting this semester, the police department will initiate a "ride-a-long" program for their cadets. The students will be shown how to operate the police radio and dispatch, and will accompany police officers on their patrols.

"The cadets want as much exposure to daily police work as we can give them," Brown says.

While the students have had the unusual opportunity to learn what police work is like, they have also come to know—and like—many of the police officers.

"The atmosphere at the police station is very relaxed," says Bob Staab, 18, a freshman from Pittsburgh, Pa. "You can go in and talk to the captain or sergeant very easily. I always know I can talk to the captain if I have a problem."





A wise man of the world touts the whimsy of love to a confirmed romantic in this scene from "Così fan tutte." The comic opera by Wolfgang Mozart will be staged jointly by the Playhouse and Conservatory at 8:15 p.m. Feb. 8, 9, 11, 13 & 15. Tickets may be reserved at the Box Office, Ext. 2705.

## School of Pharmacy responds to changing roles in health care

"Transition" is the word that Dr. Donald L. Sorby, dean of UMKC's School of Pharmacy, uses to describe what's going on in the school's building on a grassy slope at 50th and Rockhill.

"The School of Pharmacy is definitely in a kind of transition with respect to curriculum, to space and to all of its educational programs," Dr. Sorby explained. "These transitions are being brought about at the undergraduate level by the changing roles of the pharmacist in health care."

That modest phrase "changing roles" is the catalyst that has pushed the profession of pharmacy into new directions and new dimensions of responsibility, and has moved pharmacy educators across the country to create new curriculums to meet new demands. And it's particularly true here at UMKC.

"We are attempting to prepare a graduate," said Dr. Sorby, "who can meet the needs of society by providing high quality pharmaceutical services, perhaps in modes that are not totally present today, but in ways that we see emerging in the future: with the pharmacist much more involved around the patient and the drug component of patient care—serving as the consultant, the adviser."

"I believe our educational processes are now beginning to mold around that theme: getting the student to better understand drugs and their actions, to better understand diseases, to better interact with patients, to be a better communicator and to better understand the other health professionals they will be working with."

Here are three ways the UMKC School of Pharmacy—the only state-supported pharmacy school in Missouri—is meeting this challenge.

**Curriculum** —"While we are maintaining the traditional role of the pharmacist as the compounder and dispenser of drugs, we are putting more emphasis on the biological sciences so that students can better understand the role of drugs in disease. We're also giving a lot more attention to those pharmaceutical sciences that will help students determine the most effective dose of a drug for a particular patient."

**The living laboratory** —"One major feature of our new look is that we are attempting to give our students more contact with patients in what I like to call the real world, as well as more direct contact with students in the other health professions. We are developing this along two lines.

"One is to place our students in hospitals throughout the city, where they can practice with other health-science students in patient-care settings. The other is that we are putting our students in community pharmacies.

"For years, we have taught our students to dispense drugs in a laboratory with 40 desks. All they're doing is filling model prescriptions under hypothetical situations without encountering real patients. We do some role playing, a mock sort of thing, to get them used to talking to patients and physicians, but it's not really the same thing as being out there and interacting with patients, encountering them with their problems and dealing with physicians and other pharmacists, as students now do."

However, the sweep of the Pharmacy School's community involvement program extends throughout Missouri, with particular emphasis on the



Dr. Donald L. Sorby in a laboratory in the School of Pharmacy Building.

small and sometimes remote communities. Dr. Sorby and his faculty believe that by giving students this additional exposure, they can get them interested in going back to small communities to practice.

**The quarter system** —In 1973, the Pharmacy School switched from the semester system to the quarter system. Each quarter is 12 weeks long, with a one-week interlude in between.

This year-round education has distinct advantages. First of all, the quarter system gets Pharmacy in phase with the UMKC School of Medicine, which is also on quarters, thus improving the interdisciplinary education of pharmacists and physicians. Second, students will be graduated with a B.S. in pharmacy nine months earlier than students on the semester track.

"And third—and one of the most significant to us—is that it reduces the crowding in our facilities," said Dr. Sorby. "We only have a junior and senior class in the building at any one time, instead of sophomore, junior and senior classes. That means we have more flexibility in terms of our already crowded facilities."

## LAC provides quality service

George Heiserman may not be a monkey's best friend, but he is certainly one of the best persons to have around if you are doing research involving a monkey—or any other animal.

As manager of the Laboratory Animal Center (LAC), Heiserman fulfills a vital service by taking full responsibility for the proper care and handling of animals used in faculty research and teaching. This includes the procurement of animals, cages feed, supplies and related items.

LAC is the centralized service which is considered an extension arm of each research and teaching department of UMKC. The main facility is at 50th and Troost with five satellite units at the Chemistry-Biology Annex, the Biological Sciences Building and in the Schools of Pharmacy, Dentistry and Medicine.

The UMKC unit was recently cited as "Very nearly a model facility" in an Evaluation of Facilities and Care published by the University-Wide Animal Resources Advisory Committee. Heiserman said he attributes the top rating to a high level of support by Dr. Harold Burdick, Biology professor and LAC interim director, and Dr. Herwig Zauchenberger, dean of Graduate Studies, and others.

Heiserman's expertise also has helped provide a high level of operational efficiency for LAC. He has had 14 years of experience including seven years as supervisor

of the Animal laboratory of the University of California-Los Angeles. He is a certified laboratory animal technologist by the American Association for Laboratory Animal Science.

A current project being conducted with LAC assistance involves the use of cynomolgus monkeys. Eight of the animals are being injected with a chicken pox-like virus to trace its action in their tissues. The experiment may aid in the possible development of a vaccine for chicken pox for human beings. The principle investigator is Dr. Herbert Wenner, Joyce C. Hall Distinguished Professor of Medicine, and a member of the Children's Mercy Hospital department of virology.

Heiserman said that in these and all other projects, the staff—consisting of seven animal caretakers and/or technicians and four work-study students—are made aware of the purpose of the project.

"The proper care and feeding of research animals is just as important as other aspects of the research being conducted by the investigators," he said. "Thus, we make the animal caretakers feel a part of each investigation by constantly advising them of what is being done. Each research project becomes a team effort by everyone involved. I feel this helps the workers take better care of the animals."

George Heiserman with a monkey being used in an experiment at the Laboratory Animal Center.



### Ascent of man

Dr. George Gale, Philosophy professor, will be discussion leader at the next session of the College of Arts and Sciences "Ascent of Man" film and lecture series on Feb. 6.

The topic will be "The Hidden Structure." The session will be 7:30 to 9:30 p.m. in the Multipurpose Room on the Truman Campus.

### Philharmonic concert

Bluegrass music, hot apple cider and the Kansas City Philharmonic will be features of the next "Just Sittin' In" concert at 7:30 p.m. Feb. 9 in Pierson Hall.

Tickets to the event, sponsored by the University Program Council, may be reserved at the Box Office, Ext. 2705.

# It Takes Machines to Make Machines

The machine shop in the Mechanical Engineering Building is a sometimes noisy, always busy and--considering the type of work done there--a remarkably neat and clean area.

There is a quiet note of pride in Foreman Lee Anderson's voice as he explains that he and the four machinists tackle special mechanical problems for virtually every department on campus. It's title is actually the Technical Equipment Service.

On this campus--with its emphasis on engineering and sciences--there is a need for special "one-of-a-kind" equipment. Equipment for a special purpose or research function is either adapted or manufactured in the shop if at all possible. In addition to standard machines, the shop includes a glass-blowing and welding area. To illustrate the type of work they do, the glass-blowing shop recently completed components for a 14-foot laser for the physics department.

Jobs undertaken by the machine shop range from those that can be completed in minutes to complicated equipment that takes weeks or months to build. Instructions to the machinists range from a verbal description to a rough sketch of a machine to a detailed blueprint of an item to be made.

When Anderson came to UMR 15 years ago, he was the only machinist in the shop. His first big project was a high-speed camera he built for the Graduate Center for Cloud Physics Research. This piece of equipment, incidentally, is still being used.

The shop began to expand in 1962 and, over the years, has grown to the point where it takes on all sorts of projects. Work ranges from adapting a table for use by a handicapped mathematics professor to welding pipes in the power plant and building equipment for the nuclear reactor or an experiment for laboratories in any department or research center.

According to Anderson, there is a lot more to the job than just building things. The machines used for their manufacturing are mostly government surplus. With the help of departmental and research faculty, he locates, inspects, bids for and transports this equipment from all over the country. Materials used--such as steel, aluminum, brass, bolts, etc.--come mostly from the State Surplus Agency in Jefferson City. "But, we'll scrounge tools and materials from wherever we can find them," he says.

Another part of his duties includes teaching. Engineering students--especially mechanical engineers--need to know a certain



amount of information about how the machines they will be designing are made. This is taught in M.E. 53, a portion of which is taught by Anderson and one of his machinists. This semester he has 80 students in four class sections. Work-study students and graduate students making some of their own research equipment need a certain amount of supervision and assistance also.

Paperwork on cost of materials, machines, hours spent on individual projects, supplies and equipment occupy another segment of his time. A part-time secretary helps with these chores and, in general, helps Anderson keep track of everything.

Safety regulation and implementation of safety practices and procedures are an important factor. The machines, tools and equipment are used not only by the regular personnel, but quite often by students and faculty with a wide range of experience in that type of work. Anderson is proud of the fact that, so far, there has never been a serious accident in the shop.

St. Louis was the training ground for Anderson. He worked for several companies there and finally moved to St. James where he was plant manager for Manchester Machine and Tool Co. for a number of years. He was self-employed in St. James for 20 years. After he began to work for UMR he still lived in St. James but moved to Rolla nine years ago. He and his wife (she teaches piano) have three sons. The oldest is completing his Ph.D. degree at the University of Iowa and is now on the faculty of Missouri Western College, St. Joseph. The middle son is finishing work toward a Ph.D. degree at the University of Texas in Austin, and the youngest son is now a student at Southwest Missouri State University, Springfield, after attending UMR for two years.

## Secretarial Course

A course designed to prepare individuals to take an examination for certification as a CPS (Certified Professional Secretary) begins this spring at the University of Missouri - Rolla. The six-part course begins Friday, Feb. 14, with a one-day session at the University Center. The other five sections of the course are held once a week for varying lengths of time at evening sessions throughout the spring and summer months. Some sessions are held on campus and others may be held (via special FM radio) at Meramec Area Extension Centers.

The fee is \$75 per individual. However, through special arrangement with the personnel office, UMR secretarial personnel may enroll in the course for \$25 each. For further information call Norma Fleming, 4201.

## Math Colloquium

Dr. John Kieffer, assistant professor of mathematics, will speak at a mathematics colloquium Tuesday, Feb. 4, 3:45 p.m., Mathematics-Computer Science 209. His topic is "On the Entropy of a Group of Measure-Preserving Transformations." Refreshments will be served at 3:30 p.m.

## Correction

Minutes of the Jan. 16 Academic Council meeting listed the date of Challenge '75 (spring open house) as March 28. The actual date is March 8. Please correct your calendar.

## EIT Applications

Applications for Engineering-in-Training (EIT) examinations are now available in Civil Engineering 207. The completed applications must be returned by Wednesday, March 5.

## Calendar

- |          |   |  |
|----------|---|--|
| Jan. 29- |   |  |
| Feb. 1-- | Fundamentals of Shallow Foundation short course                                       | 5--Lunch and Learn meeting, Wallace Craig, noon, Mark Twain Room               |
| 31--     | Physics colloquium, Dr. Bernhard Fischer, 4 p.m., Physics 104                         | 6--Academic Council meeting, 1:30 p.m., Humanities-Social Sciences G-5         |
| --       | Student Union Board lecture, Alan Landsburg, 8 p.m., Centennial Hall                  | 7--Class roll check sent to departments  |
| Feb. 4-- | Mathematics colloquium, Dr. John Kieffer, 3:45 p.m., Mathematics-Computer Science 209 | 18--General faculty special meeting, 4 p.m., Mechanical Engineering Auditorium |

# Rolla



Temporary Affirmative Action Officer Named

Booker T. Middleton, instructor in management and field director of the University Year for Action program, has been named temporary affirmative action officer by Interim Chancellor Emery C. Turner.

As affirmative action officer, Middleton is responsible for monitoring University employment practices and developing affirmative action timetables and goals.

The search for a permanent affirmative action officer will continue. The search committee, headed by Dr. Blanche Touhill, associate dean of faculties, hopes to have a final decision by the end of February.



**Yard Awarded \$24,000 Grant**

Dr. George Yard, assistant professor of education in the Department of Behavioral Studies, has been awarded a \$24,055 grant from the Missouri Department of Elementary and Secondary Education.

The grant, to train teachers who work with severe behavior disordered children, extends Dr. Yard's work through May 31.

Dr. Yard, who has been involved with the problems of the behavior disordered child since 1967, says the grant will enable him to train teachers employed by State Schools for the Severely Handicapped and work directly with children at the Herbert Wheeler State School in St. Louis.

According to Dr. Yard, severe behavior disordered children have operational cognitive skills that are most often depressed. "They are not mentally retarded although they often function as mentally retarded children. We hope many of these children will be able to return either to large classes of handicapped children, or even to regular school classrooms," he said.

**University Program Board: "There's No Biz Like Show Biz"**

There is a certain aura of glamour and excitement implied in the phrase "show business". Even those who work on the periphery of that world seem to inherit a little of the unreality of the "business".

In her capacity as director of the University Program Board, Stephanie Kreis might be likened to UMSL's "show biz" representative. Her office on the second floor of the University Center is dominated by a large round table piled high with flyers, brochures, catalogues, copies of *Variety*, *The Village Voice*, and the review section from the *New York Times*.

For the past seven years Stephanie has served as chief mentor and director to ten volunteer and student government appointed students known as the University Program Board. The Board selects the professional and cultural entertainment sponsored with student activities funds. Free Monday-Tuesday and weekend film series, touring theatre companies, concerts and special lectures are examples of the Board's work under Stephanie's guidance.

Although not responsible for all the cultural events on campus, the Board provides a balance to Fine Arts Department's recitals and concerts and PACE's (Committee for Performing Arts and Cultural Events) theatre, lecture, art and classical music offerings.

Stephanie feels that "good" entertainment is as much a part of a student's education as class work. Even though over half the audience for any cultural event is made up of students, she explains that students don't feel these programs are all just for them. They take faculty and general public tastes into consideration when making programming decisions. "Any quality event always has general appeal," adds Stephanie, "and that is what the Program Board strives for."

Engagements for better known groups are sometimes booked almost a year in advance. Most selections are contingent on the companies' tour schedule and cost.

The college circuit is one of the theatre and concert promoters' largest markets so most of the Board's information is preceded by a barrage of flyers and catalogues. Stephanie's office receives literally hundreds of different mail promotions a year. If something looks interesting, the agent is contacted.

It was while browsing through some brochures that Stephanie came upon one advertising a British jazz singer named Cleo Laine.

"She sounded good on paper," said Stephanie, "so I gave her agent a call." He told her that Cleo could make it on her return from a California concert. Miss Laine's performance was rated a "first" in the St. Louis area.

Stephanie believes that her job doesn't end with the booking of performances. "Since my name is on the contracts, I'm the only person really identified with UMSL by these performers. I feel it is only polite to be personally available while they are on campus," she explains.

Consequently, Stephanie spends as much time "back stage" and "on the road" as she does in her office.

She was on hand with two raw eggs for Cleo Laine's mid concert snack. The night of a performance Stephanie will pick up her purse and an iron for last minute wrinkles.



Scott Joplin's ragtime music will be performed by Joshua Rifkin in a University Program Board concert March 15.

Just before the national touring company of "Two Gentlemen of Verona" arrived Stephanie bought 30 yards of black material and at 8 o'clock the morning of the performance could be seen tacking a skirt to the stage in the Multipurpose Building.

She has made emergency runs for such items as panty hose, sand bags, and recently persuaded the manager of a local pizza parlor to accept out of state liquor identification for the cast of the Boston Tea Party.

"Generally, before a performance, I just sit and wait for a problem to surface," sighs Stephanie. "No matter how much you prepare, the unexpected can and usually does happen."

One particular problem surfaced a half an hour before the Royal Shakespeare Company's anthology program "Pleasure and Repentance: A Lighthearted Look at Love" last fall. Stephanie was talking with the troupe's stage manager when she overheard the directions "hold up the crown". An uneasy Stephanie asked the stage manager, "You are doing 'Pleasure and Repentance...', aren't you?" An uneasy stage manager whispered, "No, we're doing the 'Hollow Crown', aren't we?" Fortunately, the Royal Shakespeare Company which was touring with two programs, "Pleasure and Repentance" and "The Hollow Crown," was prepared to do either program. The scenery was the same so all that was needed was a word to the actors and tragedy was averted.

Since most arrangements are made by phone or through the mail, many details and problems are not realized until the performing group arrives. In the case of the Royal Shakespeare Company Stephanie had discussed the possibility of "The Hollow Crown," then changed her mind and booked "Pleasure and Repentance..." The agent forgot to change the title on the contract and so the confusion.

The national touring company of "Two Gentlemen of Verona" posed another problem - one concerning logistics. The set the company brought was not adequate for the Multipurpose Auditorium. It was decided to improvise with flats and sand bags. Stephanie was soon on the phone and then on her way to borrow the needed bags from the American Theatre.

Because none of the UMSL stages was designed for legitimate theatre, dressing rooms and wing space is another problem Stephanie has to cope with. Twenty members of the "Two Gentlemen of Verona" cast squeezed into three classrooms in the Multipurpose Building. One of Cleo Laine's musicians warmed up in the men's room off the Penney lobby.

"Of course," Stephanie points out, "that is not as bad as the groups who had to perform in 101 Benton before Penney was built. Then the actors has to run outside and behind the auditorium to get to rooms at the other end of Benton Hall without being seen by the audience."

Stephanie manages to take most of the grief in stride and admits with a typical theater spirit that she mostly enjoys it. Even when an irate man spit at her because she told him the performance was sold out.

The Program Board will sponsor "W.C. Fields, 80 Proof", a one man comedy written by grandson, Ronald Fields, April 12.

**Saint Louis**



**Photography Critic To Speak**

A. D. Coleman, photography critic for the *New York Times*, will give a free lecture on Friday, Feb. 14 in 100 Lucas Hall. The lecture begins at 8 p.m. Coleman appears on campus as part of the First UMSL Photographic Annual series initiated this fall.

**Woodwind Quintette**

A performance by the Boehm Quintette originally scheduled for Friday, Feb. 14 has been cancelled. A return date for the group has not been announced.

**Upcoming Events Feb. 8-14**

**One Man Show**  
British stage actor Jack Aranson will appear in a one man drama based on the Melville classic "Moby Dick" Saturday, Feb. 8. Performance time is 8:30 p.m. in the J.C. Penney Auditorium. Admission is \$2 for students, \$3 for faculty and staff, and \$4 for the general public. The performance is sponsored by PACE.

**Reporter to Speak**  
Richard Dudman,

Washington correspondent of the *St. Louis Post-Dispatch*, will speak Monday Feb. 10 on "The Ford Administration: Past Performance-Future Promise?" The lecture which is free and open to the public will be held at 10:45 a.m. in 100 Lucas Hall. Dudman will also present a seminar on "The Future of U.S. Foreign Policy and Henry Kissinger" at 3 p.m. that afternoon in 331 SSBE. The lecture and seminar are jointly sponsored by PACE and the Center for International Studies.

