

## Lectures on Chinese art scheduled

Persons planning to visit the Chinese exhibition at the Nelson Gallery in Kansas City might wish to schedule their trip to coincide with one of a series of Sunday lectures to be presented at UMKC. Following are the speakers, their topics and the dates of their lectures:

- Dr. Jan Fontein, curator of Asiatic art at the Museum of Fine Arts, Boston; "Chinese Tomb Figures"; May 11.
- Dr. James F. Cahill, professor of art and curator of Oriental art at the University of California, Berkeley; "New Discoveries of Ancient Chinese

Paintings"; May 25.

- Dr. Thomas Lawton, assistant director of the Freer Gallery of Art, Smithsonian Institution; "Shang and Chou Dynasty Ritual Bronze Vessels"; June 1.

The lectures will be at 2 p.m. in Room 116, Haag Hall Addition, UMKC.

## Rolla course 'imported' from UMC

Columbia and Rolla biological sciences have gone into the export-import business.

Their "trade" is in a lab course in introductory life sciences exported from Columbia to Rolla, and while the "corporation" reports negligible profits, dividends are very high.

**The flourishing,** highly developed Columbia lab course is eminently exportable:

- A lab manual written by Fred Landa, director of the intro program, is so specific that it greatly reduces problems of varying ability among teaching assistants and makes curriculum uniform.

- Short video tapes made by Landa on course topics are sent down for use by Rolla students. He also teaches Columbia and Rolla TA's by video demonstrations showing exactly what students need to learn.

- Other audio-visual packages, such as Solo Learners, are in use on both campuses, using exactly the same instructional tapes. Even UMC's biology "Movie of the Week" program is being sent to Rolla.

- Models, charts and diagrams are either sent down or put together at Rolla for use there.

"Everything is down in black and white. Because the course was developed over several semesters' time in Columbia, we've worked all the bugs out of the system," Landa says. "If any problems do develop down there, we get on the WATS line and work them out together."

"We have the people, facilities and equipment here to find the problem quickly and advise Rolla how to adapt. Nord Gale [Rolla associate professor of life science] has given me a lot of ideas which have improved the course. The interchange has been beneficial to both campuses," he says.

**The 40 or 50** Rolla students do exactly the same activities at the same time as the 1,500 Columbia students in a semester. Yet paradoxically, the lab program is not lock-step, rigid and uncreative. It is perfectly suited to the heterogeneous bioscience backgrounds of its students. Labs can be set up according to student performance on proficiency exams. And labs are available to those who need to do catch-up work or want to do independent study.

"So many learning methods are used in the course that students can choose what helps them learn best," says Abraham Eisenstark, UMC biosciences director. "Interestingly, black students who sometimes seem uncomfortable in discussion situations will go to the Solo Learners and use them heavily. These small, inexpensive sets use video tapes with narration and background music to explain a topic in cassette form."

The Columbia-Rolla arrangement satisfies a specific Rolla campus need. Some six years ago Rolla began to strengthen its offerings in arts and sciences. But then came multiple obstacles and delays. Money was becoming scarce. Vacancies in dean and chancellor posts delayed program decisions. Campus enrollments declined. Money became scarcer. Then biological sciences had to find its place in role and scope and the campus academic plan. And money became even scarcer.

Meanwhile, the Columbia campus was experiencing some of the same problems, but directions were more evident for the already well-established Columbia biosciences effort. And UMC student demand for biomedical curricula expanded.

Despite common problems—or perhaps because of them—communication and contacts between the bioscience faculties of the two campuses



Bill Setzer (left), honors undergraduate assistant, explains a paper model of the double-spiral DNA molecule which carries genetic traits. In the background is a model showing the DNA molecular structure. Such models, which can be constructed by students, play an important role in the lab's learning activities. Below, a student, Doran Osburn, removes the fertilized embryo from a chicken egg to allow study of its development. (Photos by Jim Horton)

kept growing. Gale came up to check out Columbia's lab intro program and liked what he saw. As the export program developed, Landa visited Rolla biosciences to get a feel for its situation and facilities.

**Gale, one of only two** full-time faculty in his department, is pleased with the dividends from the imported product. It gets "very tiring," he says, to conduct regular degree curricula with such thin staffing. "They don't know how grateful we are to be able to tap into their strength to make our program go! It's a great positive for Rolla," he says enthusiastically.

"We had tried several approaches for our intro course here, but nothing was very satisfactory. The simplicity of Columbia's course, the liberal arts slant and the fact that it works so well has removed a lot of pressure from us while we try to build our other departmental commitments."

The "corporate partners" are so pleased with the export-import project that they are looking for new partners to add. "There's no reason why our common four-campus resources couldn't be pooled," says Landa. The package is also useful for adult open-learning projects such as the University of Mid-America, and federal funding to modify the course for this purpose is being sought.

Lots of visitors from other universities come, look and ask questions about the project, Eisenstark says. "We've also approached the NSF for some funding to make it exportable to external higher education institutions."

Saving money and time, avoiding program duplication and achieving uniform course content: "All intro biology courses are about the same," Landa observes. "Why discover America all over again?"

—Margaret Kraeuchi



New procedures are subjected to "dry runs" before they are incorporated into the lab course. Here, sea urchins are injected to stimulate release of ova/sperm. Fertilized ova in dishes allow students to study cell division.



## Gains for women predicted

The percentage of women medical students will probably swell from the present 18 per cent to about 30 per cent by 1985, according to medical deans surveyed by the Association of American Medical Colleges.

The deans also predicted that faculty

members would become more influential in governing medical centers and that they would be subject to greater public accountability.

A full report on the survey, conducted a year ago, was published in the April issue of the *Journal of Medical Education*.

## 'Leveler of all distinctions'

Students at the University of Iowa have started buying cemetery plots, arguing that ownership of an Iowa gravesite frees them from the obligation of paying out-of-state tuition. University officials reportedly disagree.

## Briefly

### 'Open Meeting'

UMKC Chancellor James Olson and Dr. Joe White, UMC provost for health affairs, will join President Ratchford Sunday on "Open Meeting."

The live, call-in radio program, to be broadcast at 5 p.m., will be carried on the University's FM stations (KBIA, 91.3, in Columbia; KCUR, 89.3, in Kansas City; KUMR, 88.5, in Rolla; and KWMU, 90.7, in St. Louis).

### UMSL, UMR join in study of housing

A team of UMSL researchers, assisted by engineering students from UMR, recently completed a study of the feasibility of restoring deteriorating housing in South St. Louis.

The study, which focused on four southside neighborhoods, involved a survey of 831 households and structural evaluations by the Rolla students.

### Doctorates approved

The Board of Curators has approved the conferment of two honorary doctorates at spring commencement exercises in St. Louis.

The honorees are Mrs. Frankie M. Freeman, a member of the U.S. Commission on Civil Rights, and Miss Margaret Hickey, State Department official and magazine editor.

### Dr. Kimbo named ACE fellow

Dr. Conny M. Kimbo, dean of student affairs, UMSL, has been selected to be a fellow in the Academic Administration Internship Program of the American Council on Education.

## Intercampus cooperation flourishes

A sizable exchange of talent and other resources is taking place within the University of Missouri. For several years, all four campuses have used centralized facilities for nuclear research, printing, purchasing, food processing and the like. Increasingly, cooperation also includes faculty and departments within the University as well as at various out-state locations. The process saves money by spreading resources more widely.

Take, for example, the environmental assessment study of the Arkansas River Chloride Control Project. The study is a multi-disciplinary effort involving the Rolla, Kansas City and Columbia campuses. Even Kansas State University is helping by determining what effects brine reservoirs, to be built at predetermined points on the river, will have on the surrounding areas. In this study Columbia is assessing the recreational and the socio-economic factors in the project area, Rolla is concentrating on water quality and geological engineering, Kansas City is assessing the aquatic biology and Kansas State is studying the terrestrial biology.

In another project, Missouri industry is being provided with educational and technical services relating to the federal Occupational Safety and Health Act of 1970. Persons from the Rolla, Columbia and Kansas City campuses participate in this statewide business-industry extension program.

Other cooperative projects:

- The St. Louis business school is working with Rolla in developing classroom videotape programs on elementary COBOL computer programming and management information systems.
- In January the business professionals from four campuses planned and participated in a two-day Missouri Bicentennial Economic Seminar featuring Gov. Christopher S. Bond, University President C. Brice Ratchford and key Missouri businessmen, manufacturers and legislators.

- Columbia's College of Education is conducting graduate courses on the Rolla campus for local public school teachers.

- Last year's "Forum on Community Concern" involved the Columbia, Rolla and Kansas City campuses, plus several other colleges and universities, using television and radio to discuss problems facing communities. The latest topic was energy.

- The St. Louis, Kansas City and Columbia campuses are working with the Midwest Center for Educational Opportunity to help public school districts solve educational problems related to desegregation.

- Columbia campus graduate journalism students studying urban journalism go to St. Louis and are supervised by a UMSL faculty member.

- UMR maintains a graduate engineering center in St. Louis and provides instruction leading to master's degrees in several engineering fields while UMSL provides the facilities.

- UMR's College of Arts and Sciences has a cooperative teacher-education program with UMC. Students complete requirements for B.S. degrees and take preliminary professional education courses on the Rolla campus. They complete work toward a teaching certificate or a second degree by taking a semester or more on the Columbia campus.

- Faculty of UMR life sciences are collaborating with UMC faculty to develop a laboratory curriculum for introduction to life sciences, which is taught on both campuses.

- UMR geology, civil engineering and electrical engineering faculty are working with UMC forestry faculty on a project for National University, Para, Brazil. They will teach Brazilians how to develop the Amazon River Basin.

- UMR, UMKC and UMC participated in a Missouri River study for the U.S. Corps of Engineers.
- Rolla and Columbia are investigating the environmental impact of lead and other toxic metals from industrial development in southeast Missouri's lead belt.

- UMR, UMKC and UMC, plus six other institutions, are developing films and live television presentations at various Missouri locations dealing with the relationship between government and citizens.

- The UMC and UMSL schools of education are planning programs to certify counselors and special education instructors.

- UMSL's School of Education offers courses and counseling for students enrolled in Columbia's nursing program.

## Say it again, Sam

The House Appropriations Committee's recommendation of \$120 million in UM operating funds for 1975-76 drew the following response from President Ratchford:

"We continue to appreciate the financial problems with which the legislature is contending, but the simple arithmetic of the University's situation remains the same. For each 1 per cent increase in our current salary and wage funds, it takes about \$1.4 million. A 6 per cent

increase, for example, would take about \$8.4 million. The committee has recommended a total operational increase of less than \$7 million, and has indicated that \$250,000 of that should be used to operate a school of optometry. And we continue to face higher non-salary expenses, such as the cost of fuel."

The committee's recommendation is about \$13 million below what the University asked for the next fiscal year.

## Federal funds vanish silently

In a recent presentation before an education group, a senior Republican member of the Education and Labor Committee pondered aloud why he never was informed by institutions of higher education of the successes they achieved using federal funds appropriated for programs authorized by his committee. It is worth noting that senior members of congressional committees, particularly chairmen and ranking minority members have both a constituency in the district which elects them and a national constituency comprised of all parties interested in the legislation for which their committees are responsible. When a senator, for example, decides to attack basic research which he thinks is unproductive and unworthy of federal funds, it is important that his fellow senators are learning in great detail from institutions conducting basic research precisely why such research is not only justifiable as a federal expenditure but necessary. The same holds for all other programs.

It has been suggested that institutions would serve the cause of research specifically and higher education generally if they regularly informed not only their own congressmen but congressmen on appropriate authorization and appropriation committees about how the federal dollars the institutions are receiving are being spent and the productivity of such expenditures.

Reprinted from the *Circular Letter* of the National Association of State Universities and Land-Grant Colleges

## Mannes pulls through

They're whistling a happy tune at Mannes College of Music, a major conservatory for more than half a century, now that a crash fund drive has raised enough money to save the school from collapse. Trustees had announced March 21 that Mannes might have to close.

## Marillac site discussed

Purchase by UM of Marillac College property could reduce the University's long-range capital needs by from \$3 million to \$8.6 million, according to President Ratchford.

Reporting to the curators at the board's meeting last week, Ratchford said the University would not have considered acquisition of the site had it not been for the problem of where to put a school of optometry. But he said the property, which is priced at \$5 million, is a bargain and that the University could make good use of it even if the optometry plan falls through.

Ratchford said the Marillac site could accommodate an optometry school and \$3 million worth of other needs. Without optometry, he said, the Marillac property could accommodate \$8.6 million of capital needs.

Among actions of the board:

- Awarded contracts of \$147,000 to replace windows in married-student housing at UMC and \$112,000 to light the parking area of the Hearnes building.

- Approved final construction plans for a UMKC chemical storage building.

- Authorized UMSL to offer the doctoral degree in education, effective in fall 1975.

- Approved the substitution of Washington's birthday (third Monday in February) for Good Friday in the University's holiday schedule, effective in 1976.

- Approved the purchase of a computer-assisted scanner for the UMC Medical Center.

- Approved plans for UMKC to assume most of the operation of the Institute for Community Studies, a private corporation in Kansas City.

- Deferred until a later meeting action on proposed revisions of charges to meet interest and principle charges on the Hearnes building bonds.

## DoD contracts

UM ranks 308th on the Defense Department's listing of "Contractors Receiving the Largest Dollar Volume of Military Prime Contract Awards for RDT & E" in fiscal 1974.

Among the top 500 contractors are 80 educational institutions, 49 of which have contracts

amounting to more than UM's \$795,000. The university ranking highest on the list is Johns Hopkins, whose total of \$86,104,000 makes it the Defense Department's fourteenth largest contractor.

## Honor codes declining in popularity

Changing attitudes and intensified academic pressures have made honor codes all but outmoded on many campuses.

Students from various universities who met recently to discuss the decline of honor codes agreed that the major difficulty lay in the

obligation to report on those who violate them. This, they suggested, may be largely a result of a deepened understanding of what motivates transgressors.

"The pressures are enormous now," said a University of Richmond student. "The competition

for law school, medical school and for jobs after graduation is incredible. People who had never considered cheating are now frightened into it, because if they don't cut it in college, their future may collapse."

## O'Hara's 'effort index'

Federal assistance in support of higher education would be linked to state effort under a formula proposed by Rep. James O'Hara (D-Mich), chairman of the House subcommittee on postsecondary education.

The formula is based on two factors: (1) the percentage of state personal income spent by the state for higher education, and (2) the percentage of students enrolled in the state's colleges and universities, related to the state's total population.

State expenditures for higher education, under the O'Hara formula, would not include fees and tuition paid by students.

The state with the highest "effort index," derived from the formula, would receive the maximum federal grant per student. A state making only half as much effort would receive half of the maximum grant per student. States would have to match the federal grants.

While O'Hara is inviting "rigorous examination" of the formula, he thinks it avoids flaws he has found in other formulas.

"Formulas which rely solely on state aggregate effort forever favor the wealthier states," he said. "Formulas which rely on inverse ratios to state income, or on demonstrable need forever favor those states which have the least, even if they are, as they sometimes are, those which make the smallest effort. Formulas which rely on increases in state effort may reward past penury and penalize early state initiatives."

The effort index is part of H.R. 3471.

## NASULGC enrollment survey

The latest enrollment survey at member institutions of the National Association of State Universities and Land-Grant Colleges shows an increase of 4.1 per cent over the 1973 enrollment, pushing the total past the 3-million mark.

## Willard Quine

### Paradoxes of plenty

In the Depression of 40 years ago a Harvard doctorate brought only even chances of appointment to a college faculty. One of my contemporaries won the degree in philosophy with flying colors and turned at once to train for the civil service, rather than court frustration in the field of his choice. If a man did get a teaching job, his struggles continued. He would prepare nine to 15 hours of lectures a week, besides grading papers and serving on committees. He would do his professional writing in the evenings and on Sundays and during such weeks of vacation as were not taken up with summer teaching. He would type it himself and buy the eventual reprints out of a meager salary.

If more money were diverted into academic channels, one thought, how Academia might bloom! Talent would be attracted and relieved of burdens, and a renaissance would be assured. Fat chance, in our profit-oriented society, but a man could dream.

The chance proved fatter than one's dreams. War came, and the government launched research programs related to defense. Scientific advisers noted the value, in a long view, of basic research for which no present military use could be claimed. Support was gained under this head for work in pure mathematics for which no military relevance, early or late, could be imagined. Soon there ceased to be lip service to military ends; the National Science Foundation undertook to support good science simply as such. By sharing the overhead expenses of the university, moreover, the defense contracts and the NSF grants indirectly helped also the departments that were not engaged in the programs. Eventually these departments came in for direct support as well, through the National Endowment for the Humanities. Funds were found also for indigent students, who were thus spared the handicap of having to work their way through college and so were enabled to compete on an equal footing with their rich classmates. Intellectual promise came to be the only requirement for entering college, and intellectual performance the only requirement for graduating. And there was little insistence on these.

Not a few scientists were lured from their frugal old projects by the glitter of grants. . . . Expensive projects became possible. Science is the better for the vast sums that have been poured into it. To deny this would be more than paradoxical; it would be wrong. The paradox is just that such largesse sometimes works adversely.

Universities prospered, the faculty salaries rose a good deal faster than the dollar fell. Teaching loads were lightened with the expanding of faculties. Secretarial aid was provided and reprints were subsidized. Men whose passion for the things of the mind drove them into an academic career were now spared the old penalties. This is good in itself. It has worked also for the progress of science and scholarship, by allowing scientists and scholars more time in which to be creative.

It may be supposed to have worked for the progress of science and scholarship also in another way: by attracting talent. But here we must look out again for paradox. The trouble is that vocation and amenity vary inversely. When academic life is hard, only the dedicated will put up with it. Allay the rigors and you draw men away from other occupations. . . . Thus it is that the recruitment effected by improved conditions must depress the average level of dedication to science and scholarship. The dedicated are still there, true, undiminished in absolute number; but a sag in the wider average does little for their morale.

Learned journals thrived and multiplied. Existing journals thickened, and new ones were subsidized almost as soon as they were said to be needed. Productive scholars had grown more productive, thanks to the lightened teaching load and the provision of secretaries. This accounts for the thickening of existing journals. The new ones, however, are a locus again of paradox. There are other motives for publication besides that of furnishing the profession with needed truths. There is vanity, and there is the widespread notion, sometimes founded, that academic invitations and promotions depend on publication. Certainly, then, new journals were needed: They were needed by authors of articles too poor to be accepted by existing journals. The journals that were thus called into existence met the need to a degree, but they in turn preserved, curiously, certain minimal standards; and so a need was felt for further journals still, to help to accommodate the double rejects. The series invites extrapolation and has had it.

What now of the paradox? Granted the uselessness of the added journals, what harm do they do? Mere waste of money is unparadoxical and beside the point; my paradoxes have to do not with unproductivity but with counterproductivity. Regrettably, however, the counterproductivity is there. The mass of professional journals is so indigestible and so little worth digesting that the good papers, though more numerous than ever, are increasingly in danger of being overlooked. . . .

It was in the increased admittance and financial support of students that the new prodigality came its most resounding cropper. Marginal students came on in force, many of them with an eye on the draft, and they soon were as bored with college as they had been with school. In their confusion and restlessness they were easy marks for demagogues, who soon contrived a modest but viable terror. A rather sketchy terror sufficed, in the event, to bring universities to their knees.

This turn of affairs is explained only in part by increased enrollments, and still only in part by slackening of entrance requirements. There was a third factor, more obscure, and here it is that paradox again intrudes. If in former times a student went through college on highly competitive scholarships, mere pride of achievement would tend to make him prize the college education that he thus achieved. If, again, a student put himself through college on his earnings, he must have been prizing the education for which he was working so hard. And even if a student sailed through on his father's largesse, still he saw himself as privileged and was ready enough to ascribe failures good-humoredly to his own blitheness of spirit. Mass subsidy, on the other hand, soon loses its luster and comes to be looked upon as each man's due, his return for serving society by attending class and learning what society wants him to know.

Good students are perhaps as numerous as ever, in among the bad. But the atmosphere in which they work is the worse for the hostilities and so are the standards of education. The department that I know best has freed its graduate students of the requirements of general examinations, because these were said by student activists to induce anxiety. It has also ceased to require any history of philosophy for the Ph.D. in philosophy.

It's an ill wind that blows no good. The Arab oil embargo spared us thousands of highway fatalities and decelerated the pollution of our air. I shall not venture to say, in a similarly cheerful spirit, that recent curtailments of funds for higher education are apt to hasten the renaissance that prodigality failed to bring. I offer more modest cheer: Affluence was in some paradoxical ways counterproductive, and, as we mourn its passing, we may console ourselves somewhat with that reflection.

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## Uncounted blessings

Those who would throw up their hands in the face of some seemingly irreconcilable conflict arising from UM's "four-campusness" might do well to reflect on the woes of the State University of New York.

A recent SUNY newsletter, for example, carried stories about the Faculty Senate, which governs 14,000 professionals on 34 state-operated campuses; the 55 campus associations making up the Confederation of Alumni Associations; and a meeting of representatives from 72 campuses in the SUNY network.

## Vacancies

The following professional and administrative vacancies were listed as of April 24:

UMKC — EEO coordinator.  
UMR — Staff nurse.  
UMSL — Sr. personnel assistant.  
UMC — Counselor (dormitory); registered medical technologist; research specialist (2).  
MEDICAL CENTER, COLUMBIA — Manager for safety and security; staff nurse (4); staff nurse II (2); head nurse; sr. research technician; administrative manager; personnel assistant.

Persons interested in an announced vacancy should contact the personnel office on the campus where the vacancy exists.

## Spectrum

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UMR—Sally White, 341-4259  
UMSL—Vicki P. Liberman, 453-5666

 UNIVERSITY OF MISSOURI

## Higher education bookshelf

• *Encyclopedia of Associations: A Guide to National and International Organizations*, Ninth Edition, edited by Margaret Fisk (Gale Research Co., Book Tower, Detroit 48226; Vol. I, \$55; Vol. II, \$38; Vol. III, \$48).

• *Excellence in University Teaching: New*

*Essays*, compiled and edited by Thomas H. Buxton and Keith W. Prichard (University of South Carolina Press, Columbia, S. C. 29208; \$9.95).

• *Projects, Products and Services of the National Center for Education Statistics*, by

William Dorfman (U.S. Government Printing Office, Washington 20402; \$1.75).

• *Student Personnel Work in General Education: A Humanistic Approach*, edited by Harold A. Moses (Charles C. Thomas, 302-327 E. Lawrence Ave., Springfield, Ill. 62717; \$16.75).

## UMC Medical Center serves Missourians

(The 1975 National Hospital Week (May 11-17) is a time when the American Hospital Association and its 7,000 member institutions will seek to inform the public about the hospital as a community institution. In line with this, the UMC Medical Center Publications Office has prepared the following informational article in an effort to inform the UMC campus about the center's activities.)

The UMC Medical Center serves the public in a different way. Throughout the year, its "community" is the entire state of Missouri.

As part of the University, it is the goal of the Medical Center to provide the best possible care for all Missourians both here in the center and in the communities where graduates will eventually practice. To accomplish this goal, activities are carried on in three major areas: development of a model hospital to provide the best techniques in day-to-day patient care; education of future doctors, nurses, and allied health professionals; and research for the causes and cures of illnesses.

In 1973-74, 11,556 persons were hospitalized at the Medical Center, and 957 babies were delivered. The center provided a total of 112,163 days of patient care to persons from each of Missouri's 114 counties. Visits to the outpatient clinics and emergency room numbered 115,809.

A full-time medical and nursing faculty and complete clinical facilities assure comprehensive diagnosis and therapeutic care for patients at the Medical Center. To provide necessary individual care for patients with special problems, the growth of the Medical Center has included the development of special care centers. In these centers, research efforts combined with modern teaching techniques guarantee the most up-to-date care for these special patients.

Special care centers include: Rusk Rehabilitation Center for patients disabled by stroke, spinal cord injury, brain damage, amputation, neuro-muscular disease, birth defects, or an inflammatory disease such as arthritis; a Birth Defects Center aimed at shortening the treatment and length of hospitalization for babies and children with congenital defects; a Newborn Intensive Care Nursery (for infants up to one month of age with life-threatening conditions) which is served by a Neonatal Intensive Care Transport Nursery which transfers referred infants to the Medical Center from anywhere in Missouri; an Arthritis Center for early diagnosis and treatment of the disease; Intensive Care Units for heart, chest, and stroke patients; and a Poison Control Center that is available 24 hours a day, every day.



**Arlene Martin, professor of pathology, conducts basic research to determine the difference in functions between tumor membranes and normal membranes.**



**Jan Bryant, R.N., uses the respirator in the Neo-Natal Intensive Care Nursery.**

Each of these units works to give their patients the special types of care they require, as well as to study new advanced methods of treatment, and to train students who will answer the need for more such health workers.

During 1975, the kidney dialysis unit is being upgraded to improve the treatment capabilities, and a Burn Unit will be constructed in a remodeled area of the hospital which will be the only specially equipped burn unit outside the major metropolitan areas in Missouri.

Providing the services of these special units, and the many other services available in the hospital, is a mammoth task. The staff includes 380 faculty members; 210 interns and resident physicians; 1,400 full-time students in medicine, nursing and health-related professions; and 2614 full and part time employees. All provide a variety of skills and services that play a role in providing the most up-to-date patient care possible. This work force is supplemented by 200 volunteers who annually contribute more than 20,000 hours of their time to Medical Center patients.

To help meet our state's need for more health care workers, education is an important emphasis of the Medical Center's purpose. Four hundred and thirty five medical students and 415 nursing students are enrolled here. Other education programs include those in radiological and medical technology, occupational and physical therapy, respiratory therapy, and nutrition and dietetics, with nearly 600 of these allied health career students taking their clinical training in the Medical Center by taking an active role in patient care. Non-degree courses are also offered for licensed practical nurses, emergency medical technicians and other technicians.

The Medical Center also provides the clinical setting for training of students from other areas of the campus such as social workers, speech and hearing therapists, clinical psychologists, teachers in special education, and science writers.

Graduate studies are offered in the basic medical sciences, dietetics, community health education, and health services management. There are 20 approved clinical training programs for more than 200 resident physicians in specialty training.

Faculty members, resident physicians, and students often work together toward common research goals that will lead to increased understanding of disease processes, and methods of control or prevention. The quality of research programs at the Medical Center has received substantial recognition from state and national agencies and private foundations which provide funds for such studies. This

has allowed the search for new answers to today's health problems to expand rapidly at the Medical Center.

Some of the research studies are conducted in conjunction with other departments on the UMC campus. These include bioengineering projects, cancer research, cystic fibrosis, muscular dystrophy, heart disease, multidisciplinary research into birth defects resulting from environmental hazards, among others.

The diabetes program of the Medical Center has long been established as a major center for the treatment of children with diabetes as well as research relating to juvenile diabetes. Current research here shows promise of making discoveries leading to new treatments, and perhaps preventing some forms of arthritis. Studies in pulmonary medicine are aimed at analyzing occupational lung health hazards to Missouri workers. Leukemia, high blood pressure, male contraception, poisonous insect bites, and many other health problems are being studied as part of the continuing effort of Medical Center personnel to protect the quality of life for all Missourians.

Serving the whole state as a community is a giant task that requires a large work force. Support services such as housekeeping, purchasing, medical records, pharmacy, etc., are essential to maintaining the efficiency of the Medical Center's complex activities.

Nutrition and Dietetics must prepare an average of 2,800 meals in a 24 hour day for patients, visitors, and hospital employees. Many of the patient meals are prepared to individual specifications to help speed their recovery.

Housekeeping employees work around the clock to protect patients from infection and provide necessary linens and uniforms. Approximately 105 gallons of disinfectant are used on 800,000 sq. ft. of floor space each month to guarantee the most sanitary environment for patient treatment. Employees process 145,000 pounds of laundry each month to provide patients and employees with clean linens essential to patient care and hospital maintenance.

Plant Engineering has responsibility for caring for much of the precise technical equipment used to treat Medical Center patients. In addition, they must provide basic day-to-day maintenance of lights, electrical systems, fire alarms, air conditioners, and many other services the hospital could not function without.

The Medical Center serves all Missourians by providing excellence in patient care, workers in health care professions, and research to find the causes and cures of illnesses.



Cast of "Fashion" groups together as plaque of recognition is displayed at John F. Kennedy Center for the Performing Arts.



Dr. Charles N. Kimball (left), president of MRI, accepts Chancellor's Medal from Chancellor Olson. Behind them is Clark McCorkle, University Associates president.

## UMKC drama honored at festival

When UMKC's Department of Theatre recently presented "Fashion, or Life in New York" at the John F. Kennedy Center for the Performing Arts in the American College Theatre Festival (ACTF), national attention focused on the standards of theatrical excellence operating at UMKC.

The fact that UMKC was one of ten schools chosen from 340 to participate in the eighth annual Festival, which was established to recognize college and university theatre of high quality, was in itself reason enough to be pleased and proud. But when the Washington, D.C., reviews appeared following opening night, chests were puffed perhaps even a bit fuller. Writing for the Washington Star, drama critic David Richards had nothing but praise for UMKC's production.

"The American College Theatre Festival may be only half over, but I doubt it will turn up a more ingratiating entry than the University of Missouri-Kansas City's production of "Fashion, or Life in New York" he wrote.

Indeed, the mood of the audience throughout all three performances at the Kennedy Center was that of total captivation by the style and flair of the 1880s comic melodrama by Anna Cora Mowatt.

After the performance, an air of triumphant success characterized the special awards presentations where each member of the "Fashion" company was presented with an individually engraved bronze medallion by Dale Sappers, Amoco Oil Company, sponsoring organization for the ACTF. In addition, a plaque of recognition for UMKC's Department of Theatre was accepted by Chancellor James C. Olson, Mrs. Olson, Dr. Patricia McIlrath, chairman of the Department of Theatre, and Francis J. Cullinan, director of "Fashion."

At a reception in honor of the UMKC troupe, Anthony Reed, president of the American Theatre Association, which produces the festival, commented on the production.

"Fashion was a delightful show," he said. "The work, effort, energy and talent that has gone into this show was very apparent tonight."

Also present to recognize the UMKC troupe at the reception were U.S. Representatives Richard Bolling, William Randall and Mrs. John B. Sullivan and Kansas City City Council members Mrs. Joanne Collins, Charles Hazley and Joel Pelofsky.

Dr. McIlrath expressed her delight with the company and talked about the UMKC performance as a manifestation of the validity of UMKC's approach to theatre training which is based on an organic interaction between academic and professional theater.

UMKC theater students may work with the professional Missouri Repertory Theatre, which enables the student to gain invaluable experience and to acquire professional standards of excellence. On the academic level, UMKC's programs include Experimental Theatre, Reader's Theatre and Main Stage productions.

UMKC's performances at the Kennedy Center evoke great pride throughout the University. Perhaps Chancellor Olson best reflected the sentiments of the UMKC community in expressing his own feelings on the occasion.

"My feeling is one of great pride . . . pride in the theater department, pride in the direction, and most of all, pride in the students. I think they have really represented UMKC in the best possible, shall we say, fashion."



Dr. Harry Davidson

### Dr. Davidson helps students

Dr. Harry Davidson, counseling psychologist with the Student Counseling & Testing Center, has been named assistant professor in the Counselor Education Division of the graduate program.

He is currently teaching a counseling practicum course in the graduate program. His duties with the Center include providing individual and small group counseling services for students seeking professional assistance for their educational, career and personal adjustment concerns.

He has also assumed responsibilities for delivering individual and small group mental health services for minority students in the health science fields.

### Health fair to open

Health Expo 75 will be held at Clymer Community Center, 1301 Vine on 5/10. The purpose of the fair is to raise the public's level of health awareness. More than 300 exhibits from area health care agencies with information about services available will be open 10 a.m. to 3 p.m.

The event, sponsored by concerned citizens for health, is supported by WMAHEC and the Missouri Regional Medical Program. It is held in conjunction with Health Expo Week, declared to be 5/5-10 by the Kansas City City Council.

Activities will open with a parade at the center, and tests will be offered to help participants determine their level of health.

## Jesse Gilmore sees much in 20 years

Jesse Gilmore, associate registrar, has seen many accomplishments in her long affiliation with UMKC. She will begin her 20th year with the University on 5/21. In that time, she has witnessed the most rapid era of growth for the institution: the beginning of the radio station, the addition of the Conservatory, UMKC becoming one of the four campuses of the University of Missouri, the establishment of Western Missouri Area Health Education Center, and the addition of numerous buildings, such as the University Center and Pierson Hall, the General Library, the Volker Campus Bookstore, the Schools of Dentistry, Education, Law and Medicine, and many others, as well as the addition of the Truman Campus.

She also has observed a rise in enrollment, an increase to 11,307, which has more than tripled her area of responsibility. Mrs. Gilmore coordinates the activities of the Office of Registration and Records and handles all registration procedures for UMKC on the Volker, Hospital Hill and Truman Campuses. The office also maintains all records for all students — past and present — who attend UMKC.

"Where once we handled about 800 graduates, we now have more than 2,600," she said. "We have to conduct graduation checks and finalization of all degrees for each candidate—often checking each about three times. In order to maintain our efficiency, we have progressed from a totally manual system to a highly sophisticated computer system."

The office also has to assist with enrollment and prepares registration packets for all students through data processing.

In the past year, the Registration and Records Office has been preparing for transition to the CARARS system (Computerized Admissions Records and Registration System), which is a University-wide computerized student information base to facilitate processing records for students. The program will be implemented next fall.

Mrs. Gilmore began with the University Admissions Office before being transferred to Records and Registration. She has been associate registrar for 10 years.

A native of Kansas City, she received both her B.A. in English and history and her B.S. in education at Emporia State College. She taught at Atchison, Kan. High School for three years before coming to UMKC.

In her spare time, Mrs. Gilmore said she enjoys needlepoint, reading and her four grandchildren.



Jesse Gilmore, associate registrar, checks over list of graduating students for next week's commencement.

### Royall honor set for today

Faculty and staff members of the Physical Sciences program are sponsoring an open house today to honor the retirement of Dr. Norman N. Royall, Jr., (below), Mathematics and Physical sciences professor.

The festivities will be 1-3 p.m. in Room 205 Geosciences.

Dr. Royall was instrumental in establishing the UMKC Observatory and in 1974 was recipient of the Thomas Jefferson Award, given annually to a University of Missouri faculty member who best exemplifies principles of the statesman. Dr. Royall came to UMKC in 1947 as dean of Arts and Sciences. His retirement is effective 9/1.



Dr. Norman N. Royall, Jr.

# Kansas City



Dr. Richard L. Sutton, Jr.

### Commencement to honor two

UMKC's 40th commencement ceremonies on 5/10 will include bestowing a record number of degrees on 2,656 students and the awarding of two honorary degrees. Graduation will be in two ceremonies — one for post-Baccalaureate and professional degree candidates at 3 p.m. and the other for baccalaureate degree candidates at 8 p.m. Both ceremonies will

be in the RLDS Auditorium.

Honor degrees will be awarded to Dr. Richard L. Sutton, Jr., an area physician, who will receive a Doctor of Science degree in the afternoon exercises, and to Jack Conroy, author and editor, who will be recognized with a Doctor of Humane Letters degree in the evening.

Dr. Sutton has distinguished himself internationally as a

physician, geoscientist and educator. He has published extensively in medical journals, and has written, helped write and edited many books and handbooks. He is a member of several distinguished organizations, including the National Board of Medical Examiners and the American Board of Dermatology.

Conroy, now retired,

has been described by the Chicago Tribune Book World "among the world's most recommendable persons."

He was born in 1899 in Monkey Nest coal camp near Moberly, Mo., which was the location developed in his first novel, "The Disinherited." Many of Conroy's writings capture his travels and his numerous odd jobs.



Jack Conroy

# Want to buy a pyrheliometer?

Jack Dietzman buys things. The things he buys range from a mass spectrometer gas chromatograph data logging system for the chemistry department (costing more than \$100,000) to a component for an integrated circuit (worth about a nickle) and used by several departments.

His title is assistant purchasing agent and he has been with UMR since 1966. Among other duties, he is in charge of obtaining all scientific equipment and supplies used on campus. On this particular campus, that involves a lot of equipment and supplies.

"One of the best parts of the job," Dietzman says, "is getting to meet and work with so many people. Some of the equipment is so complicated that everyone from deans, faculty, students, secretaries, technicians and sometimes even the custodians have something to say about what, how and where the equipment should be. If it's for a new building even the architects and builders are frequently consulted. And this is just the beginning. Once the equipment has been decided upon, salesmen, manufacturers' representatives, transportation people, etc., have to be contacted."

Money for such purchases comes from a number of sources. It is allocated from state funds, received through federal, state or industrial grants, or donated by alumni and/or friends of the University and winds up in departmental development funds. Because much of this money comes from public funds and tax sources, there are all kinds of rules that must be followed (campus, University, state and federal regulations) in order to safeguard large expenditures.

A typical transaction might take place as follows: A faculty member and/or student gets an idea for a research project and a certain piece of equipment is necessary to obtain the information. The faculty member calls Dietzman to see if, in general, he can come up with an estimate of what the equipment will cost.

A preliminary search is made to see if the equipment is available, who sells it and approximately how much it will cost. If it isn't available, information as to cost of component parts is gathered and estimates are made on the cost of having it made both on and off campus. The final estimate is either included in a proposal for a grant or the department decides it has enough money in equipment funds for the purchase.

When the research is decided upon, the faculty member makes an actual purchase request. Dietzman then finds out from those involved the exact details of the equipment--size, location, power requirements, exactly what functions it will be required to perform, etc.

If the cost is more than \$200 specifications are prepared and manufacturers are invited to submit bids. When a bid has been approved, a purchase order is issued. All these procedures are processed, documented and filed. And when the item is received it has to be installed and placed on inventory--more processing, documenting and filing.

At the present time, Dietzman is involved in this whole process, multiplied by three. He is making arrangements to purchase chemicals



and laboratory supplies used by all four University campuses for a year.

In addition to buying scientific equipment and supplies, he has a few other duties. Military supplies used by UMR's two ROTC programs, the concession contracts (things like cigarettes, sodas, and all other items sold through a machine), all telephones on campus, coin-operated copy machines, the campus mail room and delivery system and supervision of the 13 or 14 purchasing office staff all come under his jurisdiction.

When he isn't involved in buying things for the University, Dietzman (who has a degree in economics from the University of Minnesota), is a husband, father, sort-of-farmer, amateur athlete and "pillar" of the church.

He and his wife, Joan, their three daughters and two sons live at Elkhead Lodge, a few miles north and east of St. James. The lodge has approximately 1,000 acres of land around it.

He shares, with Joan, the chore of chauffeuring the kids to various activities, plays tennis (squeegees water off a wet court in a most professional manner), hand ball, paddle ball and is treasurer for Christ Church Episcopal (also buys things for the church very scientifically).

As a farmer his responsibilities include a few cows, some horses, numerous dogs and cats, coping with various natural disasters such as wind storms, floods, blizzards, etc., and the production of about 10,000 bales of hay per year.

Naturally, the hay baling is done with the latest scientific equipment--1952 and 1957 tractors, a 25-year-old mower and a dump rake.

## Sutton memorial dedication

Dedication ceremonies for the Bob E. Sutton Memorial will be Friday, May 9, from 5 to 6 p.m., in the Miner Lounge of the University Center.

Bob E. Sutton, former director of the UMR centennial office, died suddenly in 1972. Contributions to a memorial fund in his honor have enabled the University to commission a large painting by artist Siegfried Reinhardt. The painting is the artist's interpretation of the story of the University of Missouri School of Mines and Metallurgy.

The public is invited to attend this dedication. The painting will hang in the University Center, the building erected as a result of UMR's centennial campaign.

## Alumni banquet

Faculty and staff are invited to attend the MSM-UMR Alumni Association banquet Saturday, May 10, at the University Center. The banquet honors members of the class of 1925 (50-years) and recipients of honorary and professional degrees.

Social hour is 5:30 p.m. in the Miner Lounge and dinner is at 6:15 p.m. in Centennial Hall. Tickets are \$6.50 each and may be purchased in advance from the alumni office, Harris Hall, or at the door.

## Seminar

Samuel J. Schneider Jr., coordinator for inter-agency research of magnetohydrodynamics and federal coal gasification, Department of Interior, will conduct a seminar Friday, May 9, 4 p.m., Mark Twain Room. His topic is "Direct Energy Conversion and MHD Generators and Other Processes for Converting Coal into Useful Energy Forms. Coffee and doughnuts will be served.

# Rolla

## Calendar

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|---|--|
| May   |  |
| 5--Senior grades due, 8 a.m., Parker Hall                             | --MSM-UMR alumni banquet, 5:30 p.m., social social hour, Miner Lounge, 6:15 p.m., banquet, Centennial Hall |
| --Final examinations begin, 8 a.m.                                    | 11--Annual commencement, 2 p.m., Multi-Purpose Building  |
| 9--Seminar, Samuel J. Schneider Jr., 4 p.m. Mark Twain Room.          | 12--Grade sheets due, 8 a.m., Parker Hall  |
| --Dedication ceremonies, Bob E. Sutton Memorial, 5 p.m., Miner Lounge |  |
| 10--Spring semester closes, 5 p.m.                                    |  |