

When hope is waning . . .

Renal-disease program offers a last chance to kidney patients

On Dec. 19, 1975, at 2 a.m., Charles Smith (not his real name), 35, of Mexico, Mo., was given another chance at life—a normal life. He had just come out of surgery, having undergone a kidney transplant operation at the UMC Medical Center.

Smith suffered from a kidney disease which had progressed to the point at which his life had to be sustained by treatment several times weekly on an artificial kidney machine. The process is called hemodialysis.

But hemodialysis is a costly and sometimes unpleasant process. Besides, once the disease reaches this stage, called "end-stage renal disease," recovery is never possible. There are only two ways of getting off hemodialysis. One is by death. The other is by kidney transplantation.

Kidney transplantation, too, is a complex procedure, involving many scarce medical resources and on-the-spot integration of these services. First, someone must be willing to donate the kidney; it must be transported in a little "heart-lung" machine; the tissue type of the kidney must be matched against all the potential recipients; and, finally, the kidney will be transplanted into the best recipient. All of this must be done within a few hours—usually, it seems, in the middle of the night.

When Smith decided he wanted a transplant, he was put on a waiting list of prospective recipients. Since a kidney from a live donor was unavailable, he had to wait for a "cadaver" kidney. And at 11 p.m., on Dec. 17, 1975, such a kidney became available. A 15-year-old boy had just died of a head injury suffered in an automobile accident in Dodge City, Kan. A Dodge City surgeon removed the kidney and placed it in a "heart-lung" machine at midnight for transportation to the Midwest Organ Bank in Kansas City. The kidney arrived there three hours later.

While the kidney waited in the perfusion machine, the computerized tissue-matching system looked for a suitable recipient. Smith was selected.

At 2 a.m., Dec. 19, an airplane brought the kidney to Columbia Regional



A young patient whose life depends on dialysis

Airport. A team of perfusion technicians received the kidney at the airport and took it to the UMC Medical Center. At 1 p.m., Dec. 19, Dr. Gilbert Ross, professor of surgery-urology, and his team performed the transplantation.

All was not rosy for Smith immediately after the operation, however. For about two weeks the transplanted kidney did not respond well. Then it stabilized, and now, eight months after the transplantation, the kidney is functioning well. Smith, of course, must come to the Medical Center for periodic check-ups.

"It takes three months to determine if

the transplant has been a success," Dr. Ross said. "A danger of transplantation is the body's rejection of the organ.

"If the patient passes a year, the chance is he will go through a second year," Dr. Ross said. "We did our first two kidney transplantations four years ago, and both the patients are still living normal lives."

Transplantation is the best chance an end-stage renal disease victim has, he said. If the operation succeeds, the patient goes to a normal life, and chances are about 50-50 that it will.

The national average for successful (continued on page 2)

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Sidelines

Award for paper

Dr. Lorraine Kirk, assistant professor of anthropology at UMSL, and Dr. Michael Burton, associate professor of anthropology at the University of California, Irvine, are to receive the Stirling Award in Culture and Personality as a result of a joint research paper entitled "Meaning and Context: A Study of Contextual Shifts in Meaning of Masai Personality Descriptors." The award is to be presented Nov. 19 in Washington, D. C., at the annual meeting of the American Anthropological Association.

Groundbreaking

Groundbreaking ceremonies for UMKC's Performing Arts Center have been set for 2 p.m., Sunday, Nov. 7. The site is west of Pierson Hall, at 51st and Holmes. A reception will follow.

Progress by SIS Policy Committee

The SIS Policy Committee is continuing work to identify and assess the appropriateness of SIS capabilities, has dealt with two operational issues and identified four additional problem areas, and has set an agenda to analyze these problems.

In the last month, Dr. Richard Wallace, SIS executive officer, has visited with groups of students, faculty and administrators on all four campuses to describe the design capabilities of the computer programs which form the heart of the Student Information System. At these meetings, Dr. Wallace has distributed descriptions of the kinds of items, information and reports which the original system was designed to produce. Those in attendance were given a questionnaire to allow them to assess the need for these capabilities in terms of their own responsibilities and roles in the University. "This exercise we hope will enable us to reduce somewhat the scope of the system," Wallace said, "and concentrate our resources on those computer programs most urgently required."

Persons attending these campus meetings are also invited to express any concerns they may have with respect to the Student Information System. Among the major concerns expressed at these meetings is that needs not being met through the present system, and that student needs should have a high priority, especially regarding transcripts, timely grade reports and accurate billing. Feedback is still being received, and Dr. Wallace indicated that

more would be reported to the committee at its next session, on November 3.

Two operational issues have been addressed. Some communication problems have existed between the Management Systems division of the Office of Computing Activities and SIS users on the four campuses, primarily the directors of admissions and registrars. Personnel from Management Systems and the users have met and have worked out improved communication linkages.

The second operational issue concerns the relationship of the Columbia campus to Management Systems. Management Systems processes work orders from various offices on the Columbia campus. Given the volume of work confronting Management Systems, it has not been possible to meet all of these requests on the schedule requested by those individual offices. The Columbia campus has now established that its Administrative Data Processing Users Council will screen work and assign priorities to all work orders before they are forwarded to Management Systems. This procedure will relieve Management Systems of responsibility for making decisions about campus priorities and make more certain timely completion of urgently required items.

The SIS committee has spent a major portion of its last two meetings identifying

problems with the Student Information System other than in the computer programs themselves, and the committee is now developing procedures for analyzing and dealing with these problems. The four additional problem areas identified by the committee are: (1) the economics of the impact of the Student Information System on the University's computer hardware use; (2) the timeliness, accuracy and efficiency with which information is entered into the system; (3) inter- and intra-campus differences in requirements and operating procedures which increase the cost and decrease the effectiveness of operating the system; and (4) the need for an organizational structure for the system that specifies the roles of the participants and establishes clear-cut lines of responsibility and authority.

To focus on the underlying SIS issue—that of overall costs of operating the system compared to overall benefits—the committee agreed that the total *direct* costs of operating SIS need to be identified after the necessary first step of developing an organizational flow chart.

In addition to its November 3 meeting, the Policy Committee will meet November 17.

Members of the SIS Policy Committee: Melvin George, UMca; Paul Blackwell (representing the Intercampus Faculty Council), Jay Goldman and John McGowan, UMC; Wesley Dale and Leo Sweeney, UMKC; Glen Haddock (representing IFC), UMR; Everett Walters, UMSL; Ardath Emmons, Charles Pullen and Robert Taylor, UMca.

Budget material

The following materials, outlining the University's budget requests for 1977-78, are available at the main library on each campus:

• *The 1977-78 Appropriations Request for Capital Items, summarizing the University proposed budget, including current capital request improvement summary; details and description; five-year facility plan summary; and yearly summary, details and description for 1979 fiscal year.*

• *The 1977-78 Appropriations Request for Operations, including a statement to the Officials of Missouri from Interim President James C. Olson; general operating budget; fund summary, adjustments for salary and wage, expense and equipment and staff benefits; instruction, research, public and student service, academic and institutional support, physical plant, scholarships, University Hospital, support data and Seminary Fund.*

• *The Appropriations Request for Current Operations of the Missouri Institute of Psychiatry, State Historical Society of Missouri and Renal Disease Program.*

AMISTAD office

The Friends of AMISTAD, the country's largest repository for original manuscripts relating to the history of the Negro and other minorities, has selected Dr. Charles E. Hicks, assistant professor of music and education at UMSL, to serve on its National Board of Directors.

In announcing the appointment, Dr. Charles E. Wolfe, national executive director, said the organization would benefit greatly from Dr. Hicks's broad knowledge of the fine arts.

Dr. Hicks, who has been a staunch supporter of AMISTAD, says he is especially concerned with the preservation of the history and culture of American minorities and those of the island countries.

Dedication role

Dr. Raymond L. Bisplinghoff, UMR chancellor, participated early this month in the dedication of the International Space Hall of Fame, in Alamogordo, N.M. Dr. Bisplinghoff also served as master of ceremonies at the dedication banquet and introduced the main speaker, Dr. Thomas Paine, former NASA administrator.

Drawbacks of dialysis make it less than ideal

(continued from page 1)

cadaveric kidney transplantations is just under 50 per cent. The success average at the Medical Center is in the same range, Dr. Ross said. The success rate with donor kidneys from brothers, sisters or parents is higher—around 80 per cent.

So far 47 kidney transplantations have been performed at the Medical Center. Fifteen transplantations were done in 1975 alone.

"We are performing at about the national average," Dr. Ross said. "The problem is there are just not enough donated organs."

Of the 10,000 Americans awaiting transplants, only 2,500 will receive them, Dr. Ross said, owing to the lack of kidney

donors. The remaining patients must undergo dialysis.

"Dialysis cannot be the ideal answer to kidney disease," said Dr. Karl Nolph, director of the renal disease program at the Medical Center. "The time, inconvenience and cost of dialysis does not really make it an ideal solution."

For example, Dr. Nolph said, hemodialysis in a dialysis center can cost from \$20,000 to \$30,000 per year. Although the federal government increased the eligibility of patients with kidney disease for financial aid under Social Security, it does not pay for the first 60 to 90 days of dialysis. And payment covers only 80 per cent of the cost thereafter.

"Besides, when you think that the patient must undergo dialysis about three times a week for four to six hours each time," Dr. Nolph said, "you are not surprised that transplantation is often sought as an alternative to dialysis."

"Of course transplantation is a complex procedure, but we have the expertise," Dr. Nolph said. "The mechanics of the operation are well worked out."

"And transplantation saves money," said Dr. Arthur E. Rikli, coordinator of the Missouri Kidney Program (MoKP), a state-sponsored program administered through the University.

In 1975, some 50 patients supported on dialysis by the State Renal Disease Program received transplants, resulting in savings of \$215,000 in dialysis costs, according to Dr. Rikli.

"The average cost for the first several months of a transplantation is \$15,000. The follow-up cost is minimal," Dr. Rikli said. "As the average life of a dialysis patient is 10-plus years, a total saving of over \$2 million will be realized just from one year's transplantations. But the irony is, we may not have enough money to run such an excellent program next year," Dr. Rikli said.

The reason, he explained, is that the MoRMP, which has been instrumental in the coordination of the transplantation program and has been supplying funds to increase the number of transplants along with several other health programs in Missouri, is being dissolved by the federal government. A new agency is to take over the old one's functions, but it is uncertain how long it will take for the new agency to obtain funds to support the promotion of kidney transplantations to contain the cost of the program. A conservative estimate is two years.

"We asked the state for funds to cover the cost containment projects for the interim period, along with the regular amount the state gives us to provide patient care under the original patient-care component of the renal disease program," Dr. Rikli said. "But the state has not made the appropriation."

"This, in effect, leaves the entire transplantation program across the state without coordination, and it is not an effort that the University, nor any other agency, can undertake without funds being made available for that purpose," he said.

"A University environment provides the most favorable setting for this program," Dr. Rikli said, "and we hope it remains here. I am hopeful something will be done to continue the cost-containment part of the program. It would be a shame if this program was stopped or even halted temporarily for any reason."

Jyoti Dutta

Enrollment down 2.3%

Enrollment on UM's four campuses totals 50,011 this fall, down 1,194—2.3 per cent—from last fall's total, according to official figures.

The enrollment breaks down as follows: UMC—23,325, a decrease of 199; UMKC—10,746, a decrease of 641; UMR—4,752, an increase of 301; UMSL—11,188, a decrease of 655.

While the University's total enrollment is down from the record high of last fall, scattered reports from across the country indicate that enrollments are down at other universities as well. According to Dr. Garland Parker, an educational researcher at the University of Cincinnati, college enrollments nationwide may be about 1 per cent lower than last year. Dr. Parker, calling his findings "a surprise and a shock," said he had not expected any decline until 1980. Experts had generally expected an increase of 4.5 per cent year, following last year's rise of 9 per cent.

Dr. Joe L. Saupe, UM's director of institutional research, says the University's enrollment decline is primarily in graduate students and first-time freshmen. The number of graduate students dropped on each campus—down 150 at UMC, 237 at UMKC, 23 at UMR and 106 at UMSL. The number of first-time freshmen increased at UMR by 69, but fell by 341 at UMSL, 92 at UMKC and 32 at UMC.

Dr. Saupe suggested three possible contributing causes for the enrollment decline: (1) Potential graduate students may think job prospects for holders of graduate degrees are not so bright as in the past; (2) potential students who could not find jobs last fall now have done so; and (3) the \$30 per semester fee increase instituted this fall may have caused some potential students to go elsewhere.

Enrollment this fall by level, with last year's comparable figure in parentheses: Freshman, 11,774 (12,074); sophomore, 8,624 (8,834); junior, 9,351 (9,460); senior, 8,484 (8,600); first professional (dentistry, law, medicine, veterinary medicine and doctor of pharmacy), 2,494 (2,437); master, 7,690 (8,076); educational specialist, 119 (74); and doctor, 1,475 (1,650).

While the number of Missouri residents attending the University declined this fall by 1,372—to 43,344—the number of out-of-state students increased 178—to 6,667.

There are 30,023 men enrolled, 1,066 less than a year ago; women total 19,988, 128 fewer than last fall.

In addition to the on-campus enrollment, Dr. Saupe reported the University also has 1,652 students enrolled in extension credit courses (down 268), including 634 in graduate engineering programs in Kansas City and St. Louis; 138 in courses taught at Whiteman Air Force Base and Ft. Leavenworth; and 247 in courses taught through the University of Mid-America program.

This makes a grand total of 52,048 students enrolled in credit courses both on and off the campuses, Dr. Saupe said.

How renal program developed

In 1968 the General Assembly called upon the University and the Missouri Regional Medical Program (MoRMP) to develop and operate the Missouri State Renal Disease Program. For the first time, funds were appropriated for care of patients with end-stage renal disease.

The program was designed to bridge the gap which then existed between the needs of the patients and the ability to deliver to those patients a highly complex, technical, integrated, medical-care system.

The initial appropriation was \$100,000. Over the years, as the program proved its worth, the appropriation rose steadily, reaching \$1,125,000 in 1975-76. During this period the number of patient-care facilities increased from three to 10, and the number of patients cared for annually increased from 16 to more than 400. The number of patients now involved in the program threatens to oversaturate even the increased facilities and available funds.

Naturally, some ways had to be found to contain the cost of the program and yet provide the renal patients with all the necessary services. Kidney transplantation proved itself to be one such way and became the cost-containment component of the renal disease program.

Funds appropriated by the state through fiscal 1975-76 have been spent on patient care. Costs for the transplantation program, including its administrative costs, have been borne by the federal government through the MoRMP.

Since the federal government had announced its decision to abolish the MoRMP this September, the state was asked for the first time for funds for the transplantation program and administrative costs. The University sought \$1,675,000 (including \$225,000 for the transplantation program and \$125,000 for administrative costs) for 1976-77. The General Assembly appropriated the full \$1,675,000 requested, but Governor Bond reduced the amount to \$1,200,000, resulting in no state funds for the cost-containment program, and patient-care funds now will have to be used to cover the cost of the central program.

Vacancies

The following administrative, professional and academic vacancies were listed with Spectrum as of Oct. 20:

UMC: Administrative assistant; chemist; coordinator, ADP Production Schedule; director, PAIS; manager, University Services & Facility; placement director; research specialist; sanitarian; senior fiscal analyst; senior personnel assistant; senior research scientist; senior systems analyst (4); staff nurse; systems analyst (3); program adviser; program coordinator; senior accountant; senior methods/procedures analyst.

UMC-MC: Assistant director, Medical Center Computer; head nurse (2); nuclear medical technologist; nurse anesthetist (4); pharmacist; purchasing agent; registered medical technologist; staff nurse I (27); staff nurse II (25).

UMKC: Director, University Center & Housing.

UMR: Publications designer; assistant supervisor, Physical Plant.

UMSL: Director, FM Radio.

Persons interested in an administrative vacancy should inquire through the personnel office on the campus where the vacancy exists. Those interested in an academic vacancy should inquire through the department or school listing the opening.

Department heads wishing to place announcements of academic vacancies in Spectrum should write to Spectrum, 424 Lewis Hall, Columbia. Listings will be run in two consecutive issues and then dropped, unless further publication is requested.

Great potential seen in methane

A story that appeared last winter in *Spectrum* reported on the experimental conversion of crop waste into energy — enough to make the small Ozark farm of Ted and Rosemary Landers virtually self-sufficient. And what is possible on a small scale, says Dr. J. L. Gaddy, who is directing UMR's bioconversion research, is possible on a much larger scale as well. In fact, he says, bioconversion could provide the country with a major new supply of energy.

"The United States has vast quantities of agricultural wastes that could be used as an energy source," Dr. Gaddy says. "For example, in the Kansas City area, some 5 million tons of crop residue are available each year from the production of corn, soybeans and small grains. Only 1.5 million tons of this residue would produce 50 million cubic feet of methane per day if put through the bioconversion process. This amount of methane could be used to generate 250 megawatts of electricity, or enough to satisfy the residential electrical requirements of Kansas City. Alternatively, the crop residues from this area could be used to supply all the residential gas needs of Kansas City."

A total of 400 million tons of crop residues are available in the United States each year as an energy resource. If converted to methane, according to Dr. Gaddy, these crop wastes could supply one-fourth of the natural gas currently being used.

"In addition to crop wastes," Dr. Gaddy says, "this country has about 40 million acres of idle range and forest land that could be put into the production of energy crops. Bioconversion of crop materials from this idle land could produce all of our natural gas needs."

Bioconversion, Dr. Gaddy explains, is a solar energy process. Most solar energy schemes require expensive collectors and storage systems, but in bioconversion the sun's energy is collected by photosynthesis and stored in the plants themselves. And there certainly is no obstacle to producing the crops which would be used in the collection and storage.

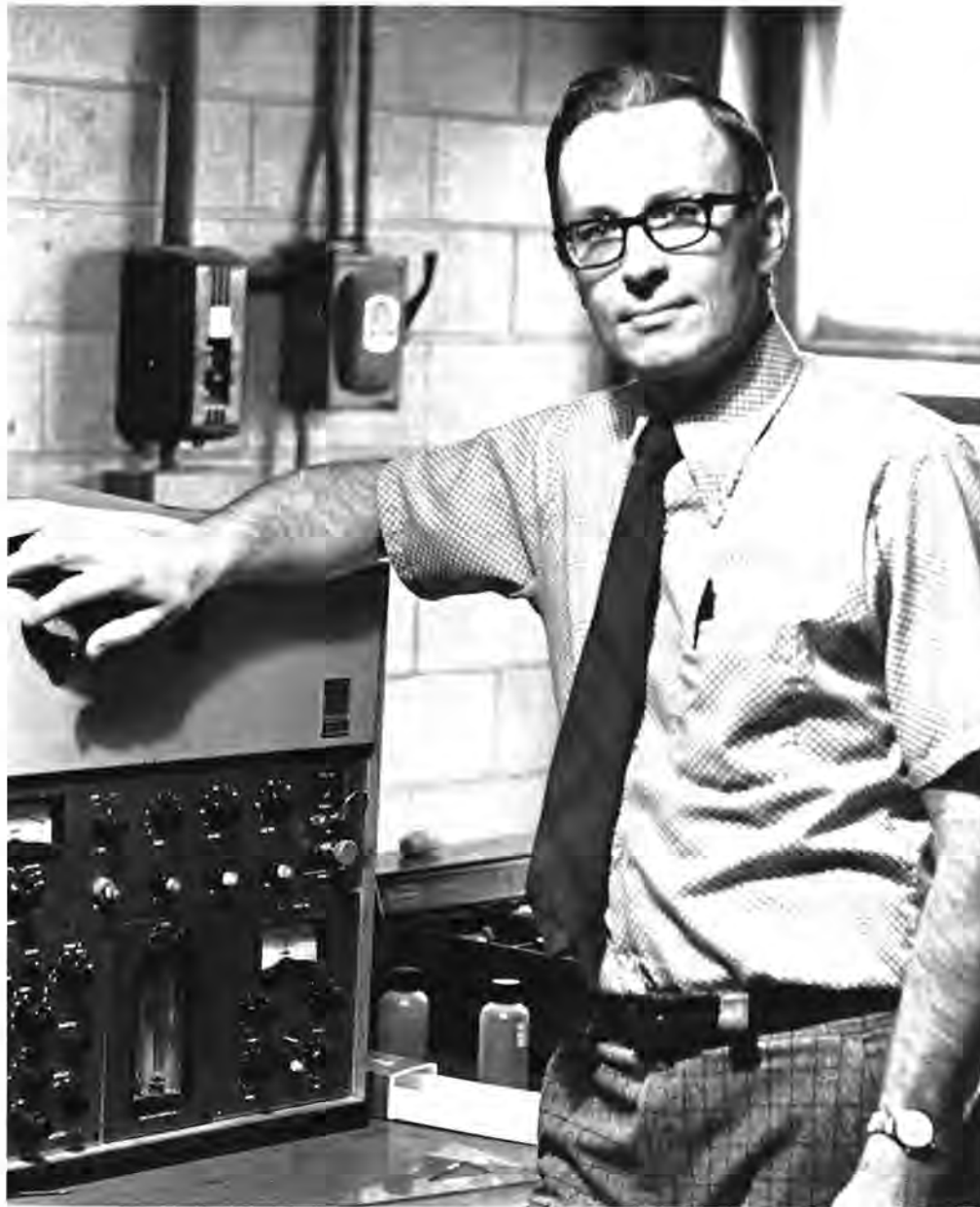
"To produce methane," says Dr. Gaddy, "the crop matter is ground, mixed with water and fed into reactors. Cultures of bacteria and micro-organisms are maintained in the reactors to produce the methane. The process is called anaerobic digestion, and has been used as a waste-treatment method for many years. Consequently, the technology is well advanced."

The bioconversion process could be adapted to either large- or small-scale production. Dr. Gaddy points to the demonstration unit under construction on the Landers farm. When completed, it will produce all the energy needed (heat and electricity) from about four acres of hay.

Research into the feasibility of large installations shows that an investment of about \$50 million would be required for a plant that would produce 50 million cubic feet of methane per day. Such a plant could earn a return of up to 20 to 30 per cent, based on current prices. The return might be increased if the effluent from the reactors can be used as a fertilizer.

"Studies at UMR are continuing to define the digestion characteristics of many materials and the best photosynthetic collectors," Dr. Gaddy says. "This work has confirmed the feasibility of methane production from such materials as cornstalks, various grasses and hay, and even oak leaves."

"The potential for bioconversion is very promising. All of our natural gas needs could be supplied by this process. No new technology need be developed, and the process is economically attractive at today's fossil-fuel prices."



Dr. J. L. Gaddy

Bisplinghoff submits report on corporations at UMR

Chancellor Raymond L. Bisplinghoff of UMR announced last Friday that his recommendations regarding the Mead corporations have been accepted by University's interim president, Dr. James C. Olson.

Initially complaints were received that several UMR professors and researchers were involved in private corporations (Mead) which were operating improperly on the Rolla campus. Chancellor Bisplinghoff appointed an ad hoc faculty committee to review these allegations, then requested an internal audit. Harold Boyer, director of the University's internal auditing and records management, completed his audit two weeks ago.

Chancellor Bisplinghoff outlined his determinations in a report to President Olson on Oct. 18. He concluded that the Mead corporation did improperly use University equipment and facilities, but that there was no willful intent to defraud the University. He also concluded that there has clearly been a lack of good business practices. The chancellor also reviewed allegations of harassment of at least one staff member of the Materials Research Center supervisory staff.

Based upon these determinations the chancellor's specific recommendations to President Olson were:

- that Dean Robert McFarland review and recommend policies and procedures to be employed in the future relative to the use of University equipment and facilities by private companies and faculty members acting in a consulting capacity;
- that a bill be sent to Mead Chemical Corporation for \$1,357.53 for final reimbursement for use of University equipment and facilities;
- that immediate steps be taken to

institute sound business practices and to reestablish the effectiveness and morale of staff members in the Materials Research Center;

- that charges of harassment be considered by appropriate faculty grievance committees upon the request of the individual faculty members.

The chancellor announced that the following steps have already been taken to achieve point three. The Materials Research Center has temporarily been placed under the administrative supervision of Dr. Jim Pogue, UMR provost and dean of faculties, with specific instructions that he work to improve staff morale. Dr. James Johnson, chemical engineering professor and research associate in the center, has been appointed acting director of the center with the same instructions. Dean Pogue is to convene meetings of an ad hoc center steering committee to recommend a permanent director and administrative home for the center.

The other recommendations by Chancellor Bisplinghoff are being implemented and follow closely the summary of Boyer's recommendations.

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Press honored

The University of Missouri Press has been honored by Printing Industries of America, Inc. (PIA) for the quality of its book and jacket designs, winning three awards for two titles from among the 4,000 entries in this year's PIA graphic arts competition.

The winning entries: *That Lonely Game: Melville, Mardi, and the Almanac*, by Maxine Moore, and *The Drawings of George Caleb Bingham: With a Catalog Raisonné*, by E. Maurice Bloch. (The latter book also took honors in the jacket category.)

Ed King, director of the UM Press, designed the winning books.

Aldrich to USDA

On Nov. 1, Dr. Richard J. Aldrich, associate director of UMR's Agricultural Experiment Station, will take over as administrator of the Department of Agriculture's Cooperative State Research Service. In that capacity he will coordinate agricultural research programs among state experiment stations and between states and the USDA.

Schnarre wins award

Dale Schnarre, farm management specialist for the Mid-Missouri extension area, is the 1976 winner of the Vice President for Extension's Outstanding Achievement Award.

The award, which was presented to Mr. Schnarre by Dr. Carl Scheneman, is primarily a result of his work with farmers in Audrain and Callaway counties on irrigation systems.

Back to CST

At 2 a.m., Sunday, Oct. 31, the University will convert from Daylight Saving Time to Central Standard Time, in accordance with federal law.

The University will remain on CST until 2 a.m., Sunday, April 24, 1977.

Kingrey honored

The Distinguished Service Award of the UMC College of Veterinary Medicine has been presented to Dr. Burnell W. Kingrey, former dean of the college. Dr. Kingrey is only the second person to win the award in the college's 30-year history.

Literary award

Dr. William Peden, professor of English at UMC, has received the 1976 Literary Award of the Missouri Library Association.

"In this bicentennial year," the citation reads, "it is particularly appropriate that the Missouri Library Association honor William Peden for his scholarship on the mind of Jefferson, for his works of fiction, for his teaching, but most especially as one who has demonstrated that words and writing are the means through which all can learn; that the past which libraries preserve represents all, and in some instances, at least, the best that man has been."

Dr. Peden has directed the UMC writing program since initiating it upon joining the faculty in 1946. The first director of the University Press, he is now head of its editorial board. In 1972 he received the Robert Earle McConnell award as the "member of the University family who most exemplifies Jefferson's attributes."

AoJ committee

Dr. Abraham S. Blumberg, newly appointed professor and head of UMKC's department of administration of justice, has been named head of a system committee to develop administration of justice programs.

The committee will try to enhance intercampus communication and coordination of the undergraduate and graduate credit as well as noncredit instruction in the administration of justice area at UMKC, UMC and UMSL. The committee's objectives include developing optimum use of total University resources for instructional and continuing-education programs in the administration of justice and to improve the capability of the University to respond to grant opportunities.

Award to Weston

Dr. Curtis Weston, UMC professor and coordinator of agricultural education, is the winner of the Distinguished Service Award for Region IV of the National Vocational Agriculture Teacher Association. Dr. Weston has also been nominated for the national association award.

Spectrum's calendar carries announcements that may be of interest to persons throughout the University system. Anyone wishing to place an announcement in *Spectrum* should write to Calendar, 424 Lewis Hall, UMC, Columbia, Mo. 65201. The next issue of *Spectrum* is scheduled to appear Nov. 12, and the calendar deadline is 1 p.m. on the preceding Friday.

Automated Literature Searching Colloquium—Oct. 29, Stewart Hall, UMC. Further info. available from UMC's School of Library and Information Science (314-882-4546).

The Taming of the Shrew, presented by The Young Vic—8 p.m., Oct. 29; J.C. Penney Aud., UMSL; tickets \$2.50, \$3.50 & \$4.50.

Trudi and the Minstrel (Children's Theatre production)—4:30 & 7:30, Oct. 29; 10:30 & 2:30, Oct. 30; 2:30, Oct. 31; UMC Fine Arts Center; for info. ph. 314-882-2021.

The Liar—8 p.m., Oct. 29 & 30; 2 p.m., Oct. 31; 8 p.m., Nov. 9, 10 & 13; 2 p.m., Nov. 14; UMKC University Playhouse, 51st & Holmes; tickets \$3; for info. ph. 816-276-2705.

Soccer: UMSL vs. Western Illinois Univ.—1:30 p.m., Oct. 30; UMSL.

Football: UMR vs. Northwest Missouri State—7:30 p.m., Oct. 30, Maryville.

Football: UMC vs. Oklahoma State—Oct. 30, Stillwater.

UMSL Symphonic Band—3 p.m., Oct. 31; UMSL Multipurpose Building. (Program: Hanson, "Laude"; Siegmeyer,

"Prairie Legend"; Wilson, "Suite for Band"; Chabrier, "Espana.")

Tadeusz Tylewski Medical Academy Choir of Gdansk, Poland, in concert, 8:15 p.m., Oct. 31; Central United Methodist Church, 51st & Oak, Kansas City; no admission charge; program includes works by Bach, Debussy and Bruckner.

Tommy Dorsey Band—6 p.m., Oct. 31; Trademart Ballroom (old Municipal Airport), Kansas City.

Etsuko Tazaki, pianist—8 p.m., Nov. 1; Grace Methodist Church, 6199 Waterman at Skinker, St. Louis; for ticket info. see earlier Saint Louis Symphony listing. (Program: Hindemith, Bartok, Beethoven.)

A Little Night Music—8 p.m., Nov. 1, Jesse Auditorium, UMC; tickets \$3.50, \$4.50 & \$5.50, available at ticket window in UMC's Memorial Union.

"A. R. C. on Paper"—works by women artists from the Artists Residence of Chicago Gallery; 9-9 Mon.-Fri., Nov. 1-30; Gallery 210, UMSL.

Soccer: UMSL vs. Washington Univ.—7 p.m., Nov. 3; Francis Field, St. Louis.

Judy Collins in concert—8 p.m., Nov. 4; Hearnes, UMC; tickets, \$3.50, \$4.50 & \$5.50, to go on sale Oct. 18 at Hearnes and Memorial Union; mail orders to Judy Collins, Box F, Columbia, Mo. 65201.

Father Teilhard—8 p.m., Nov. 4-7, 11 & 12; 2 p.m., Nov. 13; 8 p.m., Nov. 14; UMKC University Playhouse, 51st & Holmes; tickets \$3; for info. ph. 816-276-2705.

Here and There

Broadened responsibility in efforts to prevent famine

A resolution adopted at the last meeting of the Board of Curators, although receiving relatively little attention, greatly broadens the responsibility of the University in the area of agriculture.

The action came in response to the International Development and Food Assistance Act of 1975, which assigns to land-grant universities the responsibility for participating in international agricultural programs "... in order to prevent famine and establish freedom from hunger." The curators' resolution recognizes the University's responsibility in providing assistance to the developing countries, especially in the fields of agriculture, rural development and nutrition, and delegates to the president the responsibility for proper assignment within the University.

The 1975 act calls for increased and redirected efforts in the application of agricultural science and education, and for the extension of programs of research and education to include worldwide problems of food production and nutrition, with the promise of increased federal support to sustain these programs.

Programs formulated within the College of Agriculture can be expected to have several dimensions. Curriculum offerings will become more directly pertinent to international problems, as the University becomes more involved with international concerns. Research programs will undoubtedly develop in conjunction with studies being conducted by research

institutions abroad, with work being done both at UMC and at the foreign institutions. Extension offerings concerning aspects of the world food problem, designed to enlighten Missourians, and short courses for international students are expected to be expanded. It is also probable that there will be efforts to assist, build and improve institutions contributing directly to the solution of world food problems.

'Rap Sessions' at UMC, UMSL

"Rap Sessions" to which representatives of the faculty and students will be invited to discuss matters of concern with various administrative officers have been scheduled for Nov. 29 on the UMSL campus and Nov. 30 at UMC.

Under University policy, such meetings are to be held once a year on each campus. Among those present will be the chancellor, members of the Board of Curators, the president, the deans and any other UM officials the chancellor might choose to invite.

The board resolution specifies that the chancellor shall provide for the selection of faculty, staff and students who may attend such meetings, giving due regard to the elected student and faculty governing bodies. The number and mix of the participants is to be left to the discretion of the chancellor, but the total is not to exceed 40.

The chancellor will be responsible for drawing appropriate rules covering the determination of an agenda and the conduct of the meetings.

Saint Louis Symphony—1:30 p.m., Nov. 5; 8:30 p.m., Nov. 6; Powell Symphony Hall, St. Louis; for ticket info. write to Powell Symphony Hall, 718 N. Grand Blvd., St. Louis, Mo. 63103, or ph. 314-533-2500. (Program: Schubert, "Symphony No. 8"; Tippett, "Symphony No. 3"; featuring Heather Harper, soprano; Leonard Slatkin, conductor.)

Kansas City Ballet, with the Kansas City Philharmonic—8:15 p.m., Nov. 5 & 6; 2:15 p.m., Nov. 7; Lyric Theater, 11th & Central, Kansas City; featuring Fernando Bujones, principal dancer, American Ballet Theatre, and Veronica Tennant, principal dancer, National Ballet of Canada; tickets \$4, \$7, \$9 & \$10.50; ph. 816-471-7344 or SASE to Kansas City Ballet, 1208 Waltower Bldg., 823 Walnut, Kansas City, Mo. 64106.

Football: UMR vs. Washington U.—7 p.m., Nov. 6; St. Louis.

Football: UMC vs. Colorado—1:30 p.m., Nov. 6; Columbia.

Annual Faculty Show, Washington Univ. School of Fine Arts; Steinberg Gallery, St. Louis; Nov. 7 through Dec. 5; 9-5 Mon.-Fri., 10-4 Sat., 1-5 Sun.

Faculty Recital (Evelyn Mitchell, piano; Darwyn Apple, violin)—8 p.m., Nov. 8; J. C. Penney Aud., UMSL. (Program: Beethoven, Hindemith, Debussy & Mozart.)

"Environmental Aspects of Nuclear Power Plant at Fulton, Mo."—lecture by Mr. Neal Slaten, Nuclear Engineering Dept., Union Electric Co.; 7:30 p.m., Nov. 9; Room S-203, Memorial Union, UMC.

Kansas City Philharmonic—Maurice Peress, conductor; Zara Nelsova, violoncellist; 8 p.m., Nov. 9; 7:30 p.m., Nov. 10; Music Hall, Kansas City; for ticket info. ph. 816-842-9300. (Program: Schoenberg, "Survivor from Warsaw"; Elgar, "Cello Concerto"; Ravel, "Daphnis et Chloe.")

Diahann Carroll—Nov. 9-13; Pavilion Theatre, Breckenridge Pavilion Hotel, One Broadway, St. Louis, Mo. 63102; tickets \$9.50 Mon.-Thur., \$10.50 Fri. & Sat.; ph. 314-421-1776.

Move Over, Mrs. Markham—starring Patricia Blair; Nov. 9-Dec. 12; Barn Dinner Theatre, St. Louis; ph. 314-391-0710.

Modern Jazz Quartet—8:30 p.m., Nov. 10; Powell Symphony Hall, St. Louis; tickets \$4.50 to \$7.50; write to Powell Symphony Hall, 718 N. Grand Blvd., St. Louis, Mo. 63103 or ph. 314-533-2500.

Loretta Lynn & Conway Twitty in concert—8 p.m., Nov. 11; Hearnes, UMC; tickets, \$4.50, \$5.50 & \$6.50, to go on sale Oct. 25 at Hearnes and Memorial Union; mail orders to Country Shindig, Box F, Columbia, Mo. 65201.

Murray Louis & the Missouri Dance Theatre—8 p.m., Nov. 12 & 13, Lyric Theatre, Kansas City; tickets \$4, \$5 & \$6; SASE to UMKC Ticket Office, 5100 Rockhill Rd., Kansas City, Mo. 64110.

Everything in the Garden—8 p.m., Nov. 12 & 13; 2:30 p.m., Nov. 14; Edison Theatre, St. Louis; tickets \$3.