

Olson adjusts budget request, reveals impact of guidelines

On Dec. 1 President James C. Olson presented to the Senate Appropriations Committee the UM budget request for 1979-80, showing the impact of President Carter's recently imposed wage guidelines.

The guidelines would provide a reduction of \$2.9 million from the request submitted to the state earlier this fall. The original request contained a 9.5 percent increase in the UM salary and wage base, but the guidelines would enable a hike of 7.4 percent.

Dr. Olson explained that UM, under the guidelines, would seek \$156.7 million in state appropriations for operating the four-campus system, exclusive of the UMC hospital in Columbia. This is about \$19 million, or 14 percent, more than appropriated by the General Assembly for the current fiscal year.

In addition to the \$19 million state funds increase, UM would provide an additional \$4.7 million by increases in non-state revenue and/or reallocation, bringing the total budget increase for next year to \$23.7 million.

Dr. Olson explained that \$16.4 million—or 69 percent of the \$23.7 million increase—is needed just to accommodate inflation. The balance, or \$7.3 million, would be used for several program improvements.

"In my opinion, the central and most troublesome feature of the current and projected environment for higher education is inflation," Dr. Olson told the committee. "Therefore, the University of Missouri is supportive of the wage guidelines, assuming they will be effectively applied and widely accepted."

Under the guidelines, 7.4 percent would be added to the salary and wage base. However, the additional four-tenths of a percent is permitted, Dr. Olson said, because the guidelines allow more than 7 percent for employees earning \$4 per hour or less. Twenty-eight percent of UM employees are in that category.

Dr. Olson said that UM is proposing to work with the state in dealing with inflation.

"Of the \$16.4 million to cover inflation, the University proposes to fund \$4.7 million—or almost 29 percent of the increased cost—through increasing non-state revenue and/or reallocating funds now used to support

existing activities," Dr. Olson said.

Included in the non-state revenue increase is a hike in total student fee income of 5 percent. Student fee increases already have been approved by the Board of Curators and will go into effect next summer.

In addition to funds required to offset inflation in salaries and wages, Dr. Olson said inflation also needs to be met in two other areas. He explained that \$3.1 million is being sought to combat higher prices in expense and equipment, but said even that would not restore losses in purchasing power over recent years. Another \$1.3 million is needed to cover above normal cost hikes for fuel and utilities, he said.

Program improvements include:

- \$550,500 to provide utility and custodial services to five new buildings nearing completion;
- \$936,100 for upgrading libraries on all campuses;
- \$1,628,600 for improving instruction on all campuses;
- \$816,500 to improve health related professions, including expanding enrollments in the nursing program at Columbia and the medical school in Kansas City;
- \$200,000 for program staffing in the new performing arts center in Kansas City;
- \$975,200 to step up agriculture research at Columbia and energy research at Rolla;
- \$1,583,300 to replace, on all campuses, highly specialized teaching and research equipment that is worn out or obsolete;
- \$135,000 to upgrade staff benefits programs for employees;
- \$200,000 to bolster scholarships, including aid for 400 minority students; and
- \$250,000 to expand labor studies programs on all campuses.

Dr. Olson said the state funds request for operating the UMC hospital next year also would be less under the federal wage guidelines. Originally, about \$12.5 million in state funds was asked, but that would be cut to \$12.3 million.

Other funds sought for the hospital include \$1,021,800 to meet inflation in expense and equipment, \$310,200 for the neonatal intensive care unit, \$300,700 for the Rusk Rehabilitation Center, \$291,000 for the critical care unit and \$300,000 for equipment replacement.

The wage guidelines also would cause slight reductions in the requests for three other programs for which UM has budgetary responsibilities. The new amounts would be \$2,023,104 for the Missouri Institute of Psychiatry, \$2,279,680 for the Missouri Kidney Program and \$387,770 for the State Historical Society of Missouri.

NIH renews medical grant

The Clinical Research Center at the UMC Medical Center has been awarded a \$474,153 National Institutes of Health (NIH) renewal grant through Nov. 30, 1979.

In operation for 13 years, the Clinical Research Center "is the locus for clinical research in which UMC Medical Center patients participate," says Ted Groshong, the center's interim director.

The NIH grant pays the costs of the patient's hospitalization and treatment during the time he or she is cared for at the center. New approved treatments may be tried at the center by physicians conducting research on specific diseases or conditions. Among these are studies of hyperactivity in children, recurring abdominal pain in children, hypertension, rheumatic diseases (including arthritis), cystic fibrosis, and peritoneal dialysis as an

alternative to dialysis on a kidney machine and as a treatment for psoriasis.

The center's work with peritoneal dialysis has attracted national attention. This process for cleansing the blood in cases of kidney failure has been improved, and is also used to help patients with severe psoriasis.

"The Clinical Research Center has been extremely valuable to us," says medical dean Charles Lobeck. "A number of important approved research projects have been done by clinical faculty that we couldn't otherwise have paid for. The center has been especially helpful in supporting research by our kidney and gastrointestinal people."

The Clinical Research Center provides hospital facilities for 46 research projects conducted by Medical Center physicians. The center is one of 90 in the U.S.

Centers fund aging research

Legal, economical, physical and emotional aspects of growing older are all addressed in research studies recently funded by the Joint Centers for Aging Studies.

Sixteen proposals from all four UM campuses and Lincoln University received a total of \$30,000 from the federally funded center, which serves Missouri's land-grant institutions.

Projects were chosen from a total of 36 proposals, according to Rosemary Orgren, the center's educational gerontologist.

This was the second year for the grants which, at a maximum of \$3,000, are designed to finance pilot projects rather than major long-term efforts.

Researchers and projects include: Robert J. Calsyn, psychology, UMSL, "A Comparison of Two Methods of Visiting Isolated Senior Citizens"; Kathleen M. Haywood, behavioral studies, UMSL, "Changes in the Accuracy of Psychomotor Skill with Aging"; Annie M. Wells, education & psychology, Lincoln University, "Factors Responsible for the Fluctuations in Blood Pressure Level of Elderly Humans and Rats"; Dorothy J. Watson and Richard D. Robinson, curriculum & instruction, UMC, "Describing and Improving the Reading Strategies of Elderly Readers"; Ronald P. Carver, education, UMKC, "Reading Ability of Older Persons"; Philip G. Olson, sociology,

UMKC, "The Structure of Urban Initiatives and Housing for the Urban Elderly"; Ralph C. Dobbs, higher and adult education, UMC, "Second-Hand Rose in the Culture of the Aged: Significance for Social Science and Continuing Education"; Floyd K. Harmston, economics, UMC, "An Investigation into Inter-relationships between Aged Members of the Population and the Economy of Vandalia, MO";

William E. Robertson, regional and community affairs, UMC, "Rural Black Elderly in Mid-Missouri Baseline Retrieval"; Joan M. Krauskopf, law, UMC, "Legal Problems of the Aged"; Bernard Lubin and William O'Conner, psychology, UMKC, "An Ecological Investigation of Life-Styles of the Black Elderly"; Jeanne F. Bedell, humanities, UMR, "Positive Images of Aging and Active Retirement in Detective Fiction";

Paul E. Johnson, humanities, UMR, "Songs of Innocence/Singers of Experience"; Jean E. Walker, humanities, UMR, "Railtown: The Folk of Newburg"; Paul F. Agris, biology, UMC, "Study of Deteriorative Collagen Synthesis During Senescence: Analysis of Changes in Transfer RNA Molecules"; and Bob In-yu Yang, chemistry, UMKC, "Aging and the Brain Enzymes of Y-Aminobutyrate Metabolism".

Sorby selected to head group

Donald L. Sorby, dean of the UMKC School of Pharmacy, has been chosen president-elect of the American Association of Colleges of Pharmacy.

Dr. Sorby holds a doctorate from the University of Washington. He has been dean of the UMKC pharmacy school since 1974. He has written or co-authored more than 20 publications.

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Evaluation team appointed to review UM extension

Clifford M. Hardin of St. Louis, vice chairman of Ralston Purina Company's board of directors, will chair a 13-member evaluation team appointed to conduct a comprehensive review of UM extension programs and administrative structure.

The team, scheduled to submit a report to President Olson by next May, will be working in conjunction with six other review teams which are to evaluate the individual program categories of agriculture, business-industry, community development, continuing education, home economics and 4-H youth. The composition of these teams has not been completed.

Dr. Hardin was chancellor of the University of Nebraska from 1954-69 and secretary of the U.S. Department of Agriculture from 1969-71.

Other members of the team include Charles F. Curry, Kansas City realtor and former presiding judge of the Jackson County Court; William Douthit, president, Urban League of St. Louis; Mrs. Norman Powers of Windsor, immediate past president of the Missouri Extension Homemakers Association; Flint McRoberts, owner of McRoberts Farm, Monticello, Mo.; and Fred Kling, Albany attorney, former member of the UM Board of Curators and past chairman of the UM state advisory council for extension.

Two out-of-state higher education

officials also will serve on the team. They are Daniel G. Aldrich Jr., chancellor, University of California, Irvine, and Charles E. Bishop, president, University of Arkansas at Fayetteville.

Representing the UM campuses are Joseph Doerr, dean of the UMKC College of Education; James Halligan, dean of the UMR College of Engineering; E. Terrence Jones, UMSL associate professor of political science; and Edward Runge, chairman of the UMC department of agronomy. Education professor Albert Walker is representing Lincoln University, the state's other land-grant university which cooperates with UM on statewide extension programs.

The review is being conducted partially in response to recommendations of the Governor's Extension Study Commission and President Olson's state advisory council for extension.

"Our goal is to conduct a thorough evaluation of the University's extension function—in cooperation with Lincoln University—and have a written report completed by next May," Dr. Olson said.

"I am extremely pleased that Dr. Hardin and the other members of the committee have accepted this important assignment. I know that they will make a complete and objective study."

Energy conservation pays off

Turning off lights and adjusting thermostats pays off in the end—at least according to figures just released by UMC.

Rex Dillow, assistant director of the UMC Physical Plant, notes that during the past four months campus coal and electricity consumption was nearly 10 percent lower than for the same period a year ago. Total energy cost savings are estimated at more than \$187,000.

UMC's five-year-old campus

energy conservation program includes adjusting thermostats for minimum heating and cooling loads; consolidating classes and programs so energy demands in other buildings can be cut back; reducing lighting levels; improving the efficiency in the transmitting and consuming equipment, plus installation of more efficient indoor and outdoor lighting units; modification of heating and air conditioning equipment; and installation of heat recovery units.

Professors named fellows

Two UM faculty members have been named fellows in national professional societies recently.

UMSL expands MBA program

In January, UMSL will expand its master's in business administration program to meet the demands of St. Louis students seeking full-time and part-time study.

Donald Driemeier, dean of the UMSL School of Business Administration, explains that as of the first of the year UMSL will offer a full-time day program on campus and core courses at UMSL Downtown.

Previously, most of the 500 students enrolled in the program on campus were part-time. The relatively few full-time students were required to take a combination of day and evening classes.

Expansion of the program will allow UMSL to accept 35 to 40 more students in the program.

Audrey Kalafatic, UMC professor of nursing, has been selected as a fellow of the American Academy of Nursing. She is one of 50 recently honored by the academy.

Dr. Kalafatic has been on the nursing faculty since 1977. She is area director of family-child nursing for the undergraduate program in the School of Nursing and on the graduate faculty in child health nursing.

Richard B. Whiting, UMC associate professor of cardiology, has been named a fellow of the American College of Cardiology, the national society for specialists in cardiovascular diseases.

The 9,000 member society admits new members on the basis of years of practice, speciality certification and colleagues' recommendations.

Curators' meetings for 1979

The last of the 1978 Board of Curators' meetings will be held Dec. 14-15 in Columbia. The board has approved the following meeting dates and locations for 1979:

Jan. 18-19, St. Louis
Feb. 22-23, Kansas City
March 22-23, Rolla
April 26-27, St. Louis
May 24-25, Columbia
June 28-29, Kansas City
July 26-27, Rolla
Sept. 6-7, Columbia
Oct. 11-12, Columbia
Nov. 15-16, Columbia
Dec. 13-14, Columbia

Resignations announced

UMC Chancellor Barbara S. Uehling's administrative reorganization has resulted in several resignations recently.

Joe Greathouse Jr. resigned in October as director of the UMC Hospital. He will become executive director for Iowa's Health Systems Agency. Associate Director Jack Horn is serving as interim director.

Joe White resigned as provost for health affairs on Nov. 10. The position was eliminated under the reorganization plan. Dr. White has been named president of the University of Health Sciences/The Chicago Medical School.

Robert E. Kren, director of the Office of Public Information, has submitted his resignation effective Feb. 28. Dr. Uehling has indicated that an interim director will be appointed sometime after Christmas.

A screening committee for the hospital directorship and a search committee for the public information directorship will be appointed. In addition, a screening committee will be established for the new position of director for institutional research and planning. Search committees will be named for five other positions in the reorganization: provost, director of equal opportunity, graduate dean and vice provost for research, vice chancellor for student affairs and vice chancellor for administrative services.

With the exception of the screening committee for the hospital directorship, all committees will be chaired by faculty members. The UMC Faculty Council, Missouri Students Association and the newly-formed Employees' Staff Advisory Council have been asked to submit names of nominees for the committees.

OSHA grant received

The UM system has received a \$50,000 planning grant from the Occupational Safety and Health Administration.

The grant is intended to meet two objectives: development of a continuing University Extension program aimed at significantly improving the ability of employers and employees to recognize and avoid occupational safety and health hazards; and improvement of the competency of the UM Extension program in training these employers and employees in safety measures.

Master plan discussions scheduled

Public discussions of a draft of the Coordinating Board for Higher Education's master plan III for postsecondary education in Missouri began this month with meetings in Savannah, Sikeston and Kirksville.

Additional hearings are scheduled for 7:30 p.m. on the following dates and locations: Dec. 11, Springfield, Drury College's Findlay Center ballroom; Dec. 12, St. Louis, Washington University's January Hall Bldg, room 110; Dec. 13, Kansas City, Penn Valley Community College's campus center, room 503; and Jan. 22, Columbia, UMC Memorial Union, N201-202.

In developing the draft, the CBHE explored aspects of the following areas: financial access, equal opportunity, diversity of institutions; undergraduate, graduate and professional programs; research, public and community service; information storage and processing; college administration, and accountability.

The CBHE outlined several missions for UM. The following are excerpts from the report which deal specifically with UM campuses:

- UMR "... should serve the entire state at the undergraduate level, be the primary but not the sole public delivery system for master's level study in the arts and sciences and in the humanities, and be the sole public-sector delivery system for doctoral education and most graduate and professional education ..."

- UMC "... should maintain selective undergraduate admissions policies for each campus ..."

- "... The Columbia campus should continue to be the primary full-time graduate and arts and science doctoral institution and should continue to serve Missouri's traditional land-grant agricultural institutions ..."

- UMKC "... should become a major university center for health and professional education, the fine arts, and urban affairs. It should develop graduate programs, especially for working professionals who are often part-time students ..."

- UMR "... should continue to be the primary public institution for the study of engineering and related sciences and continued land grants ..."

- UMSL "... must develop in relation to the total higher education community in St. Louis. An urban-centered campus, UMSL should develop graduate programs, especially those directed at part-time students, though rarely on the doctoral level. Those programs should meet citizen needs for professional and arts and science education in the metropolitan St. Louis area ..."

All UM faculty and staff are encouraged to attend the hearings on the master plan draft. Copies of the draft have been distributed to the chancellors' offices.

Underground space: another frontier?

Ten years ago, in hurried pursuit of material for a graduate class assignment, Truman Stauffer Sr. climbed into a pickup truck and headed into an abandoned mine where boats were being built.

It was his first time inside a mine that had been converted to another use.

Only a decade later, Dr. Stauffer is a UMKC professor of geosciences with an international reputation in his field—the use of underground space. Currently he holds an \$83,799 grant from the National Science Foundation to continue his pioneering research and to develop classroom instruction materials.

Dr. Stauffer is editing an eight-volume reference manual on underground utilization. The publication will be the first collection of a broad variety of works on the topic. He also has begun to write another first in the field—a textbook on the use of underground space.

Man has long used underground space; even the Bible refers to caves used for refuge and burial sites. Dr. Stauffer's focus, however, is man-made underground space that has been converted to modern use.

"The use of underground space is not an established discipline," he acknowledges. But in today's energy-conscious, congested world, the field is drawing ever-increasing attention.

A national survey conducted by Dr. Stauffer in 1971, which was updated in 1976, shows Missouri to be a leader in the secondary use of mined-out space. The largest concentration of underground usage is in the Kansas City area where more than 2,000 people work in warehouses, factories and offices from 50 to 200 feet below the earth's surface. Some 20 million square feet of former limestone mines—roughly equal to 412 football fields—have been developed for secondary use in 15 different sites.

A massive layer of limestone, known as the Bethany Falls, underlies metropolitan Kansas City and surrounding areas. Consistently 22-24 feet thick, it dips less than a foot per mile. It has been mined extensively for a century, with the quarried limestone used as aggregate for concrete and asphalt.

The Bethany Falls is continuous except where it has been dissected by the valleys of the Missouri and Kansas Rivers and their tributaries. The bluffs created by these dissections exposed the

limestone layer, which generally has been mined by horizontal entry in the "room and pillar" method.

This method leaves behind space or "rooms" about 13 feet high and over 40 feet wide. Pillars of limestone, 25-30 feet square, are left for support. The space is generally dry due to overlying impermeable shales. Because of the straight alignment of the pillars, 50-60 feet apart, rail-lines and roadways are easy to place inside the area.

"In the Kansas City experience," Dr. Stauffer says, "men were one day miners of limestone and the next day realtors of mined-out space."

The organized use of underground space in the area began about 1945 with storage of surplus food commodities near Atchison, Kan. Underground utilization proved economical and expanded to about half a dozen sites in the 50s and 15 in the 60s.

Land, which otherwise would have been abandoned after one-time use, was being developed for secondary usage. By 1972, in the Kansas City area, secondary use of mines had exceeded stone production by more than four times, in terms of persons employed and annual wages.

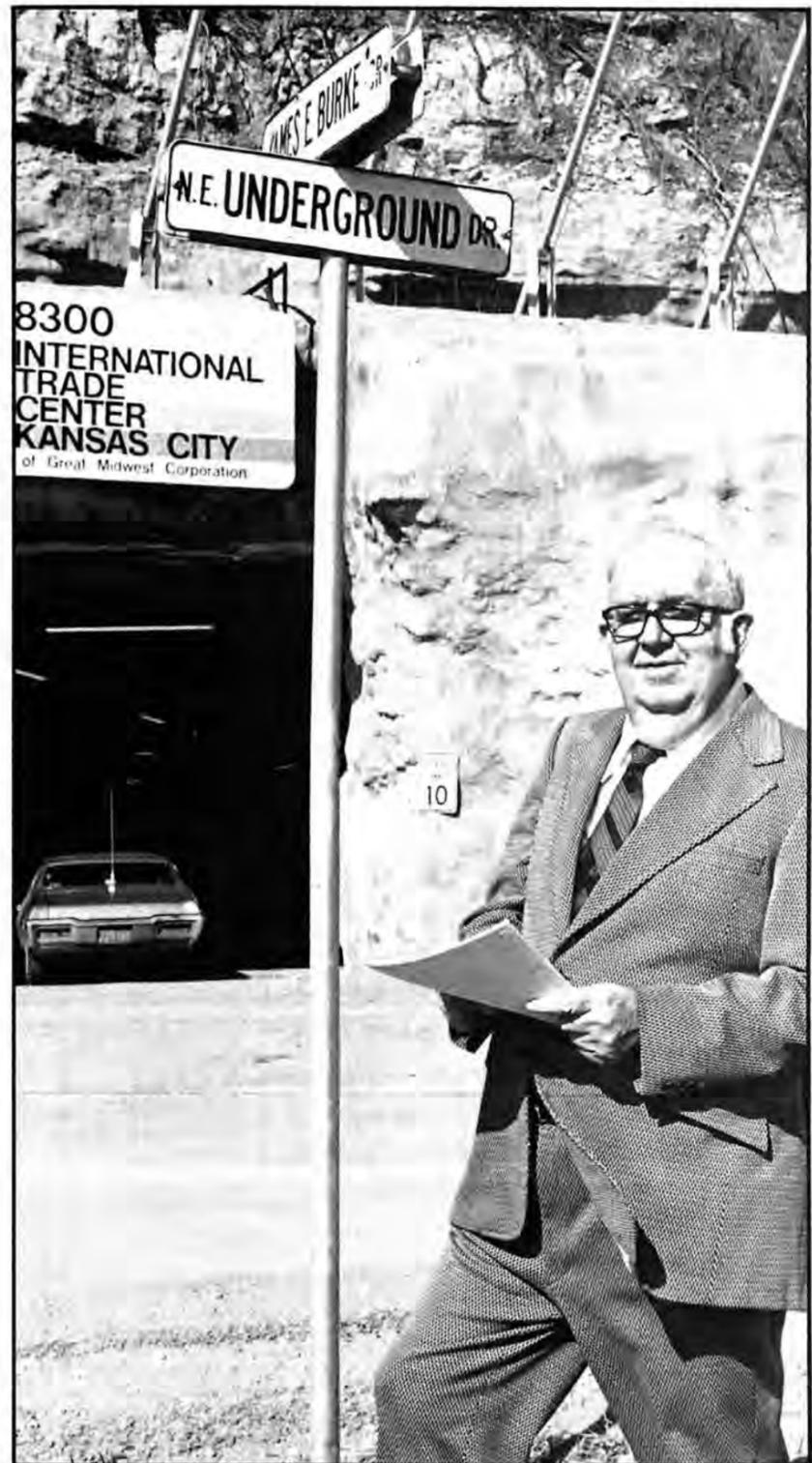
No one had made a study of underground use, though, when Stauffer entered his first underground site near Truman Road and state highway 291.

A unique development underground is a foreign trade zone—the nation's only inland zone—where foreign companies can ship goods duty-free for exhibit, storage, manufacture and assembly. They pay duty only on finished goods which enter the U.S. domestic market.

Dr. Stauffer's research has taken him to other areas of the U.S. and abroad to view various uses of underground space: the NORAD (North American defense system) installation in Colorado Springs, Colo.; sewage treatment plants, oil storage, airplane factories and transportation in Sweden and Norway as well as homes in the Loire-Cher valleys of France.

Using underground space is still unconventional, Dr. Stauffer admits, and a selling job has to be done.

Nevertheless, he sees underground space maturing to the point where it stands on its own rather than as a by-product of mining. "We want the space in and of itself because of a few cardinal strengths," he says.



Truman Stauffer

Photo by Jon Dunn

One is security. In terms of limited access, underground space is second to none, Dr. Stauffer points out.

Another strength is land conservation. "We don't add to urban sprawl. We actually create space that leaves the surface free for tax support or for non-acquisition," Dr. Stauffer says.

Looking ahead, he sees energy conservation as the greatest impetus to underground development. Underground space makes use of the earth's own temperature. In the Kansas City area, for example, the temperature of underground rock is about 58 degrees. "A few lights burning will make it a comfortable 65 degrees without any heat," Dr. Stauffer says. Energy savings in heating and cooling is at least 75 percent.

Still other advantages exist—rental costs average one-third the amount of comparable

surface facilities; underground areas themselves are fireproof and command the lowest insurance rates in the area. Humidity is easily controlled and street traffic vibrations can be escaped.

While some persons are leery of being underground, the workers who are there say they like it. They cite fewer distractions from their work, good security, no parking problems and the lack of bothersome surface weather while inside.

The advantages add up and the future looks exciting. For the vast underground areas yet to be developed, Dr. Stauffer has one major concern: that it be done right, with careful studies, necessary precautions, safety standards and proper use.

He wants no setbacks for what he considers the nation's next frontier—the valuable resource of underground space.

This & That

Medical student honored

Judith E. Harvey, a UMKC medical student, has received one of the prestigious medical perspectives fellowships. No more than 30 fellowships are awarded nationally each year, and not more than one per medical school.

Ms. Harvey plans to use the \$5,600 fellowship to develop self-education programs for patients to use in physicians' offices or hospital waiting rooms.

The medical perspectives program is administered by the National Fund for Medical Education, a public foundation chartered by Congress. Fellowships are presented to outstanding medical students who are interested in conducting research on some area of health care.

Pierce reappointed

James O. Pierce, director of the UM system's Environmental Trace Substances Research Center, has been reappointed as a special assistant to the assistant secretary in the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor.

Dr. Pierce, who has been serving in that capacity since September 1977, will continue with his UM responsibilities, commuting periodically to Columbia from Washington, D.C. He is also professor of family and community medicine at the medical school on the Columbia campus.

Tom Clevenger, acting director of the Environmental Trace Substances Research Center, will continue to handle the center's daily operations.

In his federal position, Dr. Pierce serves as a major policy adviser to Eula Bingham, assistant secretary of OSHA. He is chairman of an interagency committee assessing and consolidating governmental agency regulations and serves as agency liaison with the federal research institutes. His reappointment is for one year and he is expected to return to UM after the second year's appointment is completed.

Stevens invited to China

Glendon T. Stevens, UMR associate professor of civil engineering, is one of 50 U.S. scientists and engineers honored by an invitation to

attend a conference in the People's Republic of China.

Dr. Stevens is presenting papers on research in UMR's Institute of River Studies. He has worked on river research projects since 1974.

A member of the faculty since 1968, Dr. Stevens will return to Rolla on Dec. 15.

New reporting program

Graduate students at the UMC School of Journalism can now spend one semester in the Middle East under a new graduate reporting program.

Students will have an opportunity to study the press, politics and economy of Israel and the surrounding Arab nations.

In Jerusalem, Jay Bushinsky, a correspondent with the *Chicago Sun-Times* and Westinghouse Broadcasting, will be the adjunct professor for the School of Journalism. In Arab areas, Mustafa Amin, editor of *Al Akhbar*, the largest daily newspaper in Cairo, will advise students. The men will conduct seminars on culture and assign stories.

During the three-month term, students will work full-time on investigative reporting assignments to fulfill part of the requirements for a master of arts degree in journalism. They will file regular articles for publication and broadcasting by media in the United States.

Annually about 64 students participate in the public affairs reporting programs.

The following administrative, professional and academic vacancies were listed with *Spectrum* as of Nov. 29. Those interested in a position should contact the appropriate academic department or personnel office.

UMC: Assistant director, student financial aids; directors, equal opportunity, hospital, institutional research and planning; engineer, Physical Plant (2); handicapped career project specialist; reactor operations engineer; registered medical technologist (2); research specialist; sr. research scientist; sr. systems analyst; sr. systems programmer; systems analyst; vice chancellors, student

Bookshelf

Theory of Action, by Lawrence H. Davis, UMSL assistant professor of philosophy. The book is a study of issues relating to the nature of human action, free will and the explanation of behavior. (Pub. by Prentice-Hall).

Winning Basketball, by Chuck Smith, UMSL associate professor of education and basketball coach, and Gene Bartow, University of Alabama-Birmingham. The 228-page book is designed as a guide for coaches. (Pub. by Forum Press).

People

Roland A. Champagne, UMSL assistant professor of French, has been appointed to the editorial board of *L'Esprit Createur*, a University of Kansas Journal of literary criticism.

Donald P. Duncan, director of the UMC School of Forestry, Fisheries and Wildlife, recently received a distinguished service award from the Association of State College and University Forest Research Organizations.

David Law, UMR associate professor of Russian, has been elected executive secretary of the Foreign Language Association of Missouri.

Barbara S. Uehling, UMC chancellor, has been named to the board of directors of Mercantile Bancorporation Inc. and appointed as an advisory director of Mercantile Trust Company, St. Louis. In addition, Dr. Uehling has been named to the Commission on Military-Higher Education Relations of the American Council on Education.

Elizabeth Watson, UMSL associate professor of education, has been appointed to a three-year term as a member of the research committee of the National Council for the Social Studies.

Robert L. Davis, UMR assistant dean of engineering, was selected recently as an honorary initiate of the UMR chapter of Phi Kappa Phi, a national honor society.

C.M. Woodruff, UMC emeritus professor of agronomy, has been named "No-Till Pioneer of the Year" by *No-Till Farmer Magazine*.

Sylvia Solochek Walters, UMSL associate professor and chairperson of

art, has been awarded a purchase prize in the 1978 Colorprint U.S.A. Show.

Xavier J. R. Avula, UMR professor of engineering mechanics, presented an invited paper to the NATO advisory group for aerospace research and development in Paris, France.

Helen Harrison, UMC assistant professor of music and education, has been elected to a three-year term on the executive board of the Missouri Association for Humanities Education.

Michael Patrick, UMR associate professor of humanities, has been elected president of the Missouri Folklore Society. Dr. Patrick was also selected as president-elect of the Ozark States Folklore Society.

W. R. Miller, UMC associate dean of education, received an outstanding service award from the American Vocational Association.

Franklin King, UMC associate professor of education, has been selected chairperson of the American Vocational Association's publications committee.

Ralph Dobbs, UMC professor of higher and adult education, received a meritorious service award from the national Adult Education Association recently.

Clayton H. Johnson, UMC associate professor of geology, was presented the Missouri Science Educator Award by the Science Teachers of Missouri.

James Fischer, UMC research associate, has been named young engineer of the year by the Missouri section of the American Society of Agricultural Engineers.

Jobs

affairs, administrative services; Provost; director, Academic Support Center; assistant professors, accountancy (2), anthropology, biological science, child health, (2) English, finance, food science and nutrition, geology, industrial engineering, psychology, radiology, Romance languages, speech & dramatic art (3), surgery; civil engineering (2), computer science, education, electrical engineering, medicine;

Associate professors, electrical engineering, English, history; professor, history, law (2), plant pathology;

UMC Medical Center: Assistant director, nursing, assistant executive housekeeper (2); computer programmer analyst II (2); computer project manager; health care evaluation analyst; head nurse (2); medical records administrator; pharmacist; registered medical technologist (3); supervisor, telephone communications; staff nurse (43);

UMKC: Administrative associate II & III;

UMC: Energy conservation engineer; manager, bookstore; sr. systems analyst; adjunct assistant professors, electrical engineering (4); specialist in electronics of scientific instruments;

UMSL: Director, counseling center.

Scientists win USDA grants

Agricultural Experiment Station scientists at UMC have received three of the competitive grants awarded this year by the USDA's Science and Education Administration.

"That's quite a tribute to the quality of our researchers whose reputation was a big factor in this national competition," said William Pfander, associate dean for research in the UMC College of Agriculture.

Grant recipients include: Boyd O'Dell, professor of biochemistry, \$175,000 for a three-year grant to study the chemical characterization of dietary fiber; M. G. Neuffer, professor of agronomy, \$50,000 for a three-year study of corn mutants used in developing improved corn varieties; and Anton Novacky, associate professor of plant pathology, \$40,000 for a three-year study of bacterial pathogens' effect on plant cell membranes.

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