

SIGNS OF SPRING—just as the swallows have returned to Capistrano, the ducks have returned to the UMSL lake.

Kiehl to head research group

Elmer R. Kiehl, dean of the UMC College of Agriculture, has been granted a one-year leave of absence during which he expects to serve as chief of the research division for the Board for International Food and Agriculture Development in Washington, D.C. BIFAD relates to the Agency for International Development, U.S. Department of State, in the development of international food and agricultural programs.

The leave of absence is effective

Committee OK's \$152.4 million

The House Appropriations Committee, chaired by Rep. Wayne Goode (D-Normandy), has tentatively approved an appropriation for the UM system for 1979-80 totaling \$152,474,565, an 11 percent increase over the current figure.

The committee's recommendation is subject to action by the House as well as the Senate Appropriations Committee and Senate. Final approval of UM's appropriation is by the Governor.

Included in the House committee's recommendation is a 6.5 percent increase in the salary and wage portion of the budget.

The committee's recommendation for the UMC Hospital totals \$12,261,500, a 4.7 percent overall increase. It also includes a 6.5 percent salary and wage increase.

April 16. Dr. Kiehl said his new appointment has not yet cleared the department. He expects final action on the official appointment in the next four to six weeks.

According to UMC Chancellor Barbara Uehling, an interim dean will be named soon to serve as head of the College of Agriculture while a permanent replacement is sought for the position. In his announcement Dr. Kiehl said he will not return to the dean's position at the end of his leave.

In addition Schell H. Bodenhamer, College of Agriculture associate dean for extension, has retired from his position. Dr. Bodenhamer is also a veteran UMC faculty member. He has served as associate dean since 1965.

Dr. Kiehl joined the UMC faculty in 1946 as an assistant county agent in Carroll County. In 1947, he joined the campus' extension faculty as a livestock marketing specialist.

From that position he moved to instructor in the UMC department of agricultural economics in 1949; as assistant professor in 1951; as associate professor in 1953; as professor in 1955; and as department chairman in 1957.

He was appointed dean of the College of Agriculture in 1960.

While Dr. Bodenhamer will relinquish his associate dean's position, he will remain on the UMC faculty through June to work with whomever is selected to fill his position.

Dr. Bodenhamer's service to UMC dates back to 1947. He worked for the UMC extension programs as a director before becoming associate dean in 1965.

Union donates historic records

One of America's oldest unions, St. Louis Typographical Union Local #8, will donate its records dating back to 1856 to the UM Western Historical Manuscript Collection in special ceremonies Monday, March 12 in Columbia.

Union president John J. Ebeling will present the papers on behalf of the 1400-member union to Nancy Prewitt, associate director of the Columbia branch of the collection, at a reception at 11 a.m. at the Western Manuscript offices in Ellis Library.

Richard S. Brownlee, UMca director of the Joint Western Historical Manuscript Collection and the State Historical Society Manuscripts Collection will speak on future plans for the development of labor history records.

Among the invited guests are UMC Chancellor Barbara Uehling, UM faculty members who teach in areas related to labor and members of the St. Louis union.

Organized in 1852, Local #8 was one of the 14 charter members of the

International Typographical Union.

According to a member of the union executive board, John P. Stewart, the Civil War period is a particularly interesting one in the organization's history. Although it did not reach fruition, there was a movement within the local to break off from the national organization and form a Confederate group.

Also during this period, the issue of women and equal pay emerged. After a debate about the danger of women leaving their "proper sphere" if granted equal pay, the members voted to admit women to the union.

"We are especially pleased with the donation of these records," Dr. Brownlee said. "Thanks to the generosity of the union members, we have been able to add this valuable perspective to our collection."

The records are available for public use on any UM campus by writing to Mr. Ebeling at Union headquarters, 706 Chestnut, Suite 819, St. Louis 63101, or by contacting Ms. Prewitt.

Institute honors professor

Walter Keller, UMC professor emeritus of geology, has received the highest award given by the American Institute of Mining, Metallurgical and Petroleum Engineers.

Known for his work with Missouri refractory clays, Dr. Keller received the 1978 Hal Williams Hardinge Award at an AIME convention held in New Orleans recently.

Dr. Keller said refractory clays

from Missouri "are among the best in the world." Though the police strike in New Orleans "washed out the Mardi Gras celebration, it was a great honor to receive the award and a pleasure to meet some of my associates and former students," Dr. Keller said.

A Kansas City native, Keller has been a member of the UMC faculty since 1930. In addition to his 150 professional papers, Dr. Keller has written five books.

Review of extension activities to be completed by May 1

Reports from six review teams evaluating the individual program categories conducted by UM and Lincoln University are due to be completed by mid-March and submitted to an overall comprehensive team. The team is due to report to President James C. Olson by May 1.

The six category review teams—composed of more than 50 citizens and out-of-state experts—cover the program areas of agriculture, business-industry, community development, continuing education, home economics and 4-H youth.

The 13-member comprehensive review team, which will use the six

other team reports as a basis for writing its report in April, is headed by Clifford Hardin, former University of Nebraska chancellor and U.S. Secretary of Agriculture. Hardin currently is vice chairman of Ralston Purina Company, St. Louis.

The extension 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 May," Dr. Olson said.

UMKC, UMSL report on problem of student attrition

In addition to the problem of declining enrollments, student attrition rates and how to effect a reduction in those rates have become major sources of concern within higher education.

At the last monthly meeting of the UM system Board of Curators, two reports on student attrition were presented. Dianna C. Martin, director of the UMKC Student Learning Center, outlined that center's efforts and UMSL Chancellor Arnold B. Grobman summarized a recent study of attrition on the St. Louis campus.

In introducing Dr. Martin, UMKC Chancellor George A. Russell stressed that the major objectives of the learning center are "to reduce the attrition and failure rate and help students learn how to study and learn how to learn."

Dr. Martin noted that the UMKC Student Learning Center, which was established in 1974, differs from most such programs in that the emphasis is on an outreach rather than a drop-in approach. The center's programs are individualized for each department and course in cooperation with the faculty involved and are conducted within the schools or departments. Focus is on group rather than individual assistance.

Last year, the center reached 18 percent of UMKC's undergraduate student population. The center's programs include both writing and mathematics laboratories as well as use of the supplemental class model technique.

Dr. Martin explained that the supplemental class model technique involves a center staff member working with the professor, teaching assistants and students in a specific course. The staff member attends all lectures, completes required readings and then

conducts supplemental class sessions for interested students.

The sessions stress note-taking, text-reading, test-taking, bibliographic and study skills. The center staff member functions as a role model of successful student behavior in these areas rather than as a teacher or intermediary between students and the professor.

Use of this particular technique has had some rather dramatic results, according to Dr. Martin. For example, the technique was used in History 1010, the introductory level course in American History. Data collected over a three-year period indicates an overall reduction of 18 percent in the expected attrition rate of that particular class.

Dr. Martin said that supplemental class sessions are also used in other courses which have been identified as high risk, entry level situations, such as Economics 202 and Biology 108.

Dr. Grobman's report on attrition studies at UMSL noted that the progress of 100 students, who entered in the fall of 1975, were traced by computer. For the purposes of the study, the students were divided into two categories: first-time freshmen and transfer students.

The study, according to Dr. Grobman, showed that of the first-time freshmen who entered in 1975, 50 percent of the white students and 40 percent of the black students are now in their senior year at UMSL. Of transfer students, 30 percent of the blacks and 20 percent of the whites are now seniors.

Dr. Grobman explained that the study separated blacks and whites within the sample to determine if race had an effect upon retention.

"Someday, I hope this (race)



Helping students "learn how to learn" reduces attrition rates.

won't be an important matter for us to consider," Dr. Grobman said. "But in today's climate, it is a very important question."

Dr. Grobman stressed that economic factors seem to be quite important as far as the success of students. He noted that students from lower income backgrounds generally have had poorer academic preparation because of the conditions at inner city schools, less books available at home and are generally less sophisticated

about academic matters. The reverse is true of those students from higher income families.

He pointed out that blacks are disproportionately represented in the lower income categories and whites are disproportionately represented in the upper income categories.

Dr. Grobman emphasized that programs such as the UMKC Student Learning Center and UMSL's Center for Academic Development should ameliorate some of the difficulties.

Campuses put energy-saving ideas into action

Faced with the rapidly rising costs of oil and coal, faculty and staff at the four UM campuses are continuing to "think energy."

At UMSL, an automatic control center helps energy savers put their thoughts into action. Paul Elsea, UMSL director of Physical Plant, said,



LIGHTS OUT—As part of the campuses' energy conservation programs, students have been encouraged to turn off lights when they leave their dorm rooms.

"We have a lot of night classes here, but with the automatic control center we've been able to really save on our electric bill. We've checked the class schedules and programmed the computer so we can shut down automatically a particular area of a building, or the whole building."

Purchased in 1976, UMSL's automatic control center saved 5 million kilowatts in the 1977-78 fiscal year, a 25 percent reduction from the previous year.

The automatic monitoring center reduces the peak load demand—a critical factor in determining unit costs of electricity. When demand for electricity at UMSL approaches the peak demand, the center shuts off parts of the air-handling system.

In the '79-'80 appropriations request submitted to the legislature, the UM system has asked for \$3,579,040 for energy conservation equipment, which includes three central automation control systems for UMC, UMR, and UMKC.

Meanwhile, some innovative, common-sense ideas are being put into practice. At UMKC, elevators have been fitted with keys so power is used only when the key is turned to the 'ON' position. Keys are allotted on a priority basis. And the refrigeration units in the water coolers have also been disconnected.

John T. Fales, chairman of UMKC's Committee on Energy

Conservation, reports an 8.3 percent reduction in energy costs over the past nine months. Dr. Fales works with 63 "building energy supervisors" who monitor energy-saving efforts. Classroom buildings have been classified on a scale according to use to determine their critical energy needs.

"We're trying to reduce energy in an impartial, fair way," Dr. Fales said, while noting that criticisms have been mild.

At UMR, an energy coordinator has been appointed for each building. One effect has been the disconnection of between 4,500 and 5,000 lights. For example, an office with four florescent lights now is lit with only three. And UMR is continuing to use available funds for improving insulation and installing storm windows.

At UMC, the major effort over the past year has been to consolidate evening classes so that entire buildings may be shut down after 5 p.m. Evening classes at the General Classroom Building, for example, have been moved to the Arts and Sciences Building, so that the temperature in GCB can be lowered to 55 degrees.

"For further savings, and to maintain our present conservation level, we are all going to have to put out a tremendous effort" says Rex Dillow, UMC assistant director of Physical Plant. "But the biggest reductions in the future will come with an improved technology."

Consulting enhances teaching

By Don Constantine

Sioma Kagan has led the kind of life that makes good book and movie plots.

Born in Russia, the UMSL professor is today one of the nation's leading international business consultants and economic forecasters. Each year, he travels some 80,000 miles criss-crossing the globe for corporate clients such as IBM, Exxon, Motorola and Aramco.

Dr. Kagan is a former French war hero, successful businessman, a diplomat, a scholar, and UMSL's first professor emeritus. He has an undergraduate degree in electrical engineering, a master's in economics, and a doctorate in economics and international relations.

He has been acquainted with statesmen such as the late Charles de Gaulle, and Jean Monnet, the father of the European Common Market; some of the world's top corporate executives; and his colleagues include John Kenneth Galbraith, and Paul McCracken, former chairman of the Council of Economic Advisers.

Yet first and foremost, Dr. Kagan is a teacher. He has served with distinction at Columbia University, Washington University, the University of Oregon, and since 1967 as professor of international business at UMSL.

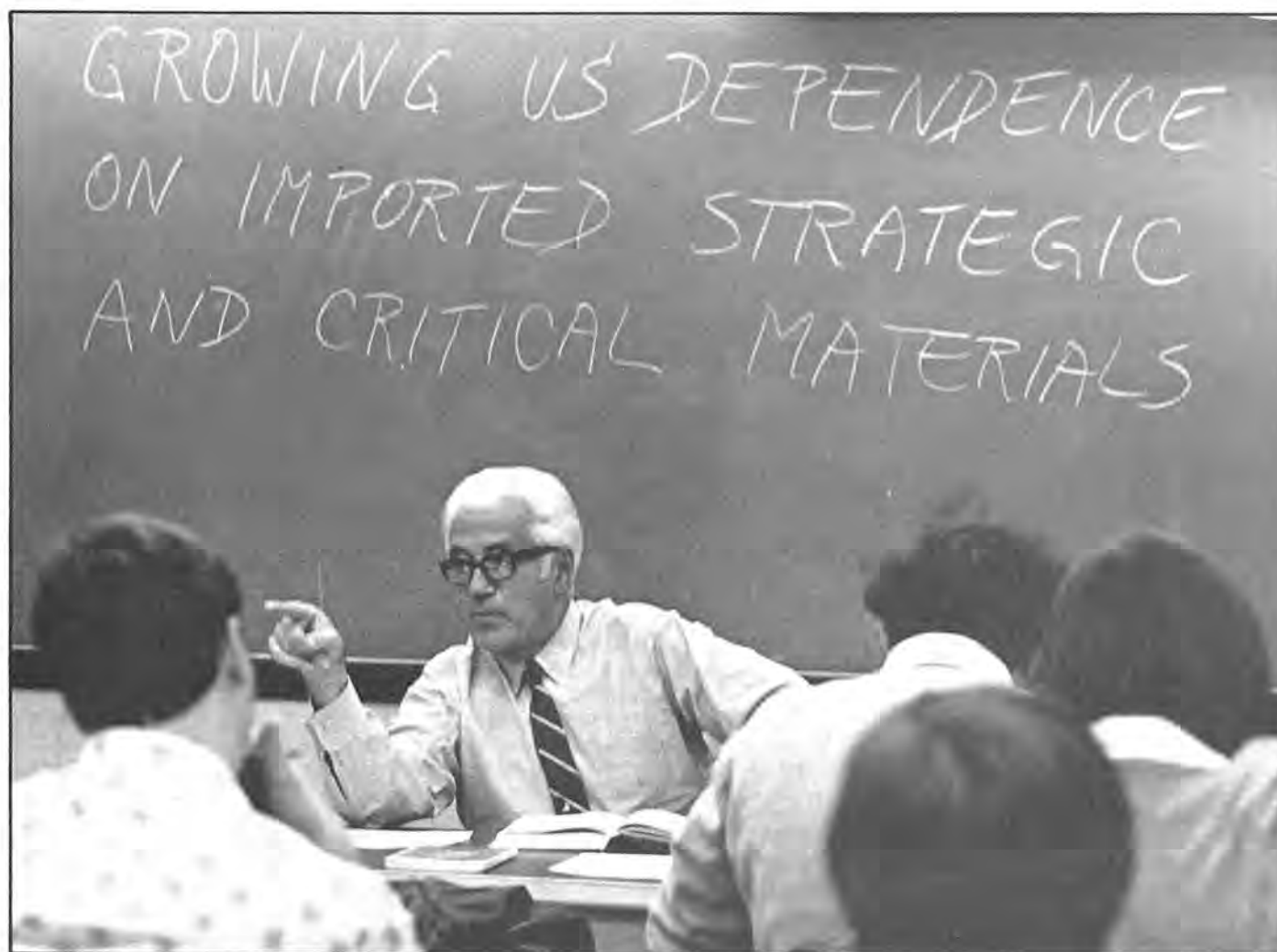
"Let me tell you a story," he says as he moves into his favorite topic of conversation. "Twenty-two years ago I was teaching at Columbia University. In one of my classes there was a young man named Jacques Maisonrouge. He had a great deal of talent and after he graduated we began corresponding and occasionally would run into each other.

"He called me early last year to ask me to inaugurate a seminar series for his company's top executives. He was willing to wait for five months until I could work it into my schedule. This past summer I launched the series with a lecture on 'Outlook 2000 at the Cercle Interallie (Paris' most prestigious private club). It was a great honor and certainly one of the highlights of my career." Mr. Maisonrouge is chairman of the Board of IBM-EMEA (Europe, Middle East, Africa), a subsidiary that accounts for \$7 billion of IBM's annual sales of \$18 billion.

Although none of Dr. Kagan's students at UMSL have yet reached that level of success, he is just as proud of what they have achieved. "Our young graduates are beginning to make it," he says. He mentions several graduates who are vice presidents of major banks in St. Louis, and a young woman who is rapidly moving up the ladder at Exxon.

What Dr. Kagan does not mention is that he played a larger role in their success than teaching. There is Sioma Kagan, fundraiser, and Sioma Kagan placement officer.

"Dr. Kagan has taken a great deal of interest in the future of his students," according to Donald Driemeier, dean of the business school. "He has graciously donated honorariums from speaking engagements to set up prizes for our students. Just this past week, we



UMSL emeritus professor Sioma Kagan in action.

received a check from Motorola to be used to set up another award in Dr. Kagan's name." The contribution was in recognition of Dr. Kagan's 50th lecture at the Motorola Executive Institute.

The young woman Dr. Kagan mentioned was interested in the economics of oil. He put her in touch with an executive at Exxon and she was subsequently hired. Dr. Kagan has also been instrumental in getting major corporations to recruit regularly on campus, notably IBM.

But back to Dr. Kagan, the man and the book. He was born in 1907 in the Russian seaport of Riga. His family later moved to Moscow, where he received his early education. In 1918, Kagan was enrolled in a Moscow gymnasium, which is equivalent to grades 5 through 12 in the United States. It was a period of great turmoil in Russia. The Bolshevik revolution had begun and Dr. Kagan and his mother decided to flee the country.

To escape, his mother "fictitiously" married an Austrian prisoner of war, a perfectly legal and accepted practice at the time. In 1921 when prisoners were repatriated, Dr. Kagan and his mother fled the country—a harrowing two-week trip in a railroad cattle car.

After relocating in Berlin, he earned his undergraduate degree in electrical engineering in 1931 from the Technical University located there. For a short while, he worked as a scientific assistant at the university, before moving to Paris where he helped found an electronics company that furnished submarine detectors for the French Navy. Then World War II erupted.

After the collapse of France, he joined the Free French Forces in London and was commissioned chief signal officer. His assignment—get "Radio Brazzaville," the voice of Free France in the French Congo, on the air. He succeeded—magnificently. For this service, he was awarded the Legion of Honor, France's highest

military honor. The award also earned him a rare handwritten note. "Mon Cher Kagan...Charles de Gaulle."

While serving in Central Africa Dr. Kagan became interested in economics. How could these people be so poor? It was a puzzle that needed a solution.

Later during the war he served in the French diplomatic corps in Washington, D.C. and at the same time enrolled in American University there to search for an answer. He received a master's degree in economics and went on to earn a doctorate in economics and international relations from Columbia University.

He soon became intrigued with the concept behind a new organization, the United Nations, and took a post as one of the first UN economic affairs officers. While there, he played a key role in establishing the Economic Commission for Asia and the Far East (ECAFE) in Shanghai.

After leaving the UN, he began a consulting and teaching career that eventually took him to the University of Oregon, with a stopover at Washington University in St. Louis. For the seven years he was at Oregon, he was the university's only professor of international business, the same situation which exists at UMSL.

Dr. Kagan believes his career as an international business consultant to some of the world's leading corporations complements his teaching, a rationale shared by many of his students. "In the classroom, I don't have to rely on a casebook...I can share with my students actual problems and situations being faced today by Standard Oil and Motorola. When we discuss the energy crisis, I can call on 25 years of experience working with Exxon, Aramco, and Sun Oil." The kinds of contemporary insights Kagan provides makes the courses he teaches some of the most popular offered by the school and may account for the

stacks of correspondence he receives from former students.

Dr. Kagan is also in the risky business of economic forecasting. He is not afraid to stick his neck out. In 1976 he was one of the first economists to predict the second devaluation of the dollar which occurred two years later.

"We need the proper leadership to convey to the American people that we cannot continue to live beyond our means...that we need to 'pull up our socks' to raise our productivity, to quit acting like immature teenagers, and to reassume our role as the world's leading power. The American people would respond to that kind of challenge," he says with conviction.

Professor Kagan reveals his philosophy of teaching at UMSL: "As a relatively new campus we have to keep our standards high. Our graduates are still being judged. That's why I am tough. A new institution must continually prove itself. We can't let one 'bad apple' slip through and ruin it for everyone. My students understand and agree with this philosophy...it's in their own best interests."

At 70, Dr. Kagan could easily pass for a man in his late 50's. He could be excused for wanting to slow down, but that is not the case. Last year he logged 100,000 miles, a new record for him. He also taught more students than ever before.

What makes Dr. Kagan tick? The answer may be revealed in his response to a request from "Who's Who in the World" for his philosophy on life:

"In my life I have not believed old folks who refer to the past, however remote or recent, as 'The Golden Age.' We have barely started to scratch the surface of human potential—the golden age lies ahead of us and will be what our transcultural empathy, competency and drive will make it."

Mr. Constantine is director of the UMSL Office of Public Information.

This & That

Lectureship established

UMC has established the Fred McKinney Psychology Lectureship. Dr. McKinney retired in 1978 after 47 years on the faculty.

Dr. McKinney gained international stature through his pioneering and classical studies in the areas of human learning and memory. He has written a number of textbooks and served as a consultant to educational institutions and government agencies.

The endowment was established through gifts from former students, friends and colleagues.

New trust received

The UMR engineering management program has received a \$250,000 trust from Edward A. Smith of Tulsa, Okla., for support of teaching and research, student financial aid and as a contribution for a new building.

The perpetual charitable trust is entitled the UMR Engineering Management Trust and is established at The Fourth National Bank of Tulsa. It will be funded over three years. Of the total, \$150,000 is dedicated to capital construction of a new building.

Mr. Smith, 83, is chairman of the board of the Service Drilling Co., of Tulsa and owner of EASCO, an oil producing company in Oklahoma. He was born in St. Louis and grew up working his father's farm. A veteran of World War II, Mr. Smith was a member of UMR's class of 1924. In 1972 he was honored by UMR by being granted a professional degree of engineering manager.

A short-week summer...

For the second consecutive year, UMSL will operate on a four-day work week during the summer session, June 11-Aug. 3.

UMSL realized savings of approximately \$12,000 by observing a four-day schedule last summer. In addition, there was a potential 20 percent savings in gasoline expenses for students and employees.

Program helps elderly

Lonely senior citizens in north and central St. Louis County may benefit from an UMSL program titled "the Friendly Visitor Program."

Through the program, interested senior citizens are visited by UMSL

psychology and sociology majors who volunteer as part of their course work.

The program is part of a study being conducted by UMSL psychology professor Robert Calsyn. Funded by a grant from the Joint Centers on Aging, the study's results should show the types of visiting most helpful to senior citizens.

Olson named to committee

President James C. Olson has been selected as one of the 12 members of a National Association of State Universities and Land-Grant Colleges' steering committee for a caucus on the arts in higher education.

The newly-formed caucus is composed of 22 organizations, including art associations in higher education. Purpose of the caucus is to support art in higher education and, in particular, focus on public policy in this area.

UMC OPI interim director

Kenneth Whitt, assistant director of University Information Services, has been appointed interim director of the UMC Office of Public Information. He assumed the new position March 1.

Mr. Whitt replaced Robert E. Kren, whose previously-announced resignation became effective Feb. 28. A search committee will be named soon to screen applications for the permanent position.

Mr. Whitt joined the UM system in 1972 as extension information officer. He was named UIS assistant director in 1976. He holds a bachelor and master's degree in journalism from East Texas State University and an Ed.S. degree in higher and adult education from UMC.

Library director appointed

Ronald Krash has been appointed director of libraries at UMSL, effective May 1.

Mr. Krash is currently general library director for the Pennsylvania state library. He was associate director of the St. Louis University library from 1968-73.

He holds a master's degree in library science from Wayne State University.

Steinhardt to head firm

William Steinhardt, director of the UMKC Office of Public Information, has been appointed president of the direct marketing agency of Jankus-Steinhardt Direct in Kansas City, effective April 1.

Mr. Steinhardt has been director of the UMKC OPI for the past nine years. The office was recently consolidated with the Alumni and Development Communications and retitled as Office of University Communications. James M. Zahnd has been appointed acting director of the new unit.

Mr. Steinhardt is president of the Kansas City chapter of the Public Relations Society of America and vice president of the Direct Marketing Club.

Physics: a family affair... for UMR professor, sons

By Winona Roberts

When three members of a family are physics professors and they get together to compare notes, lively discussions frequently are the result.

For the Fuller family of Rolla, these discussions became the basis for a textbook. Nicknamed "Fuller Cubed," the father-and-sons team are authors of *Physics Including Human Applications* published by Harper & Row recently.

The composition of "Fuller Cubed" is: father, Harold Q. Fuller, dean and physics professor emeritus at UMR where he was physics department chairman for 23 years; and sons, Richard Fuller, chairman of the department of physics at Gustavus Adolphus College, St. Peter, Minn., and Robert Fuller, professor of physics at the University of Nebraska, Lincoln. Robert is a UMR alumnus.

The book evolved when all three of the physics professors, who were teaching similar courses for the general physics students who had not taken calculus, discovered a need for a textbook especially suited to the pre-med and life science student. The authors began writing the textbook in 1973 and continued whenever and wherever the three of them could get together, says Robert, "from the cornfields of Iowa to the Chinese restaurants of San Francisco."

"At the beginning we assigned ourselves modules according to topic," H. Q. says. "These later became chapters, but we all advised and modified until all the chapters represented input from all three of us."

"We originally had thought just in terms of a textbook," he says, "but when we talked to a publisher, they asked for additional manuals."

The resulting instructional package includes an 812-page textbook, a 136-page laboratory manual, a 249-page instructor's manual, and a 290-page student study guide. The lab manual



Harold Q. Fuller

was written largely by Richard. The manual and some of the book are now used at Gustavus Adolphus and the University of Nebraska. The recently published text is being used this year at UMR and several other colleges and universities in the United States and Canada.

The three Fullers were honored with a publisher's party at the annual meeting of the American Association of Physics Teachers and the American Physical Society in New York City last month. In addition, UMR's Dr. Fuller, who has been honored many times by his profession, will receive an honorary doctorate from his alma mater, Wabash College, in May.

With the textbook now completed, what do the three Fuller physicists talk about when they get together?

Physics, of course. When, as Richard puts it, "physics is viewed as an exciting human activity by all of us," it's a natural topic.

- Ms. Roberts is an information specialist at UMR.

Jobs

The following administrative, professional and academic vacancies were listed with *Spectrum* as of Feb. 28. Those interested in a position should contact the appropriate academic department or personnel office.

UMC: Coordinator, alumni center; director, office of public information; engineer, Physical Plant (2); manager, campaigns & special projects; reactor operations engineer; scientific programmer/analyst I; student services coordinator/counselor; systems analyst (3);

Associate vice-president (academic administration and planning) - UMca; associate vice-president (research) - UMca.

UMC Medical Center: Asst. directors, nursing, personnel; asst. manager, medical records; computer programmer/analyst II (2); head nurse (5); medical records administrator; nurse practitioner; registered medical technologist; staff nurse (45);

UMR: Asst. director, student financial aids (2); buyer; energy conservation engineer; scientific

programmer/analyst II; sr. information specialist; faculty position: electrical engineering; lecturer, engineering management; dean of students.

UMKC: Admissions counselor; scientific programmer/analyst I.

UMSL: Assistant/full professor: management; asst. professor, biology (2), economics (2), mathematics (2), physics, education, behavioral studies; Instructor: mathematics, French, Russian; varsity basketball coach.

Bookshelf

Sociology, Race and Ethnicity: A Critique of American Ideological Intrusions Upon Sociological Theory, by Harry H. Bash, UMSL associate professor of sociology. (Pub. by Gordon & Breach, Science Publishers Ltd., London)

Science With Children, by Doris Trojcek, UMSL associate professor of education. (Pub. by McGraw-Hill).

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Editor: Anne D. Robinson
Ph. 882-4591

