



Sam A. Werner

## UMC professor receives 4th presidential research award

Samuel A. Werner, UMC physics chairman whose work in neutron scattering and neutron physics has cast him in a prominent role in the international scientific community, has received the UM system's fourth annual \$10,000 Presidential Research Award.

UM President James C. Olson announced the recipient this week. Werner was recommended unanimously by a review committee composed of faculty from the four UM campuses. Werner can use the \$10,000 prize to support his continuing research in any manner he chooses.

The president also announced that an additional \$976,421 will be used to fund 72 research projects throughout the UM system. These projects and the presidential award are supported by investment income on proceeds from the 1979 sale of UM's Weldon Spring property in St. Charles County. The income is being used to support scholarly, artistic and creative instruction-related activities of University faculty.

The 72 projects funded by Weldon Spring were chosen from proposals made by faculty from all four campuses.

"The Weldon Spring income gives the University a way to reward the commitment of its faculty to research," Olson said. "In the broadest sense, research is the product of the scholar's imagination. We continue our efforts to encourage and protect the search for new knowledge, even in the face of financial hardship that we continue to experience."

Werner joined the UMC faculty in 1975 after 11 years as a senior scientist for the Ford Motor Company in Michigan. His dynamic career has involved collaborative experiments with scientists throughout the United States and Japan, England and Sweden. Physics journals have published more than 70 of Werner's papers on his original work. In the last four years he has given some 40 invited talks around the world.

Basic research in quantum physics, says the 46-year-old scientist, is "the origin of almost everything high-tech. Without research on fundamental questions in physics, we wouldn't have the laser, computer or television," he says. "These are possible because we have a basic understanding of matter and energy."

Physics is the base of all engineering and the science behind chemistry and biology,

says Werner. He calls physics research "an intellectual adventure" that locks him and fellow scientists into an ever-changing world of experiment and theory.

Faculty colleague Henry White describes Werner's recent work as "perhaps the most exciting of his career." Bringing a new field of neutron physics research to the United States, Werner has conducted a series of neutron interferometry experiments with Purdue University scientists.

The key to the experiments is a neutron interferometer Werner designed. The heart of the device is a single crystal of silicon, the material used to make transistors. Precision-machined at UMC, the crystal must be isolated from vibration and temperature changes because movement of one hundred-millionth of a centimeter can alter results. The device is located at the UM Research Reactor.

Werner has juxtaposed the world of cosmic scale events, in which gravity plays an important role, with the very small world of elementary particles, where interference phenomena and quantum mechanics are important factors. Some of his experiments also detected the minuscule effect of the Earth's rotation and gravity on the quantum mechanical phase of neutrons.

Notice of Werner's achievement in several prestigious science journals followed. At the invitation of *Physics Today*, one of the most widely circulated journals in the field, Werner wrote the lead article on neutron interferometry in a recent issue.

The physicist also has earned praise from the highest ranks in his own field. Among them is Chen Ning Yang, Nobel Prize winner for physics in 1957. Yang, a researcher at the State University of New York, calls Werner "a very imaginative physicist" and terms his neutron interferometry work "absolutely beautiful."

Currently Werner is collaborating on a long-term project to measure the neutron's electric dipole moment. If successful, the measurement would provide the benchmark for new theories on the fundamental nature of matter.

Werner is also a consultant to the Argonne National Laboratory's multi-million dollar project to develop the intense pulsed neutron source, which will be this country's next generation of neutron sources.

## Risk management training courses begin this month

The second level of the Safety and Risk Management Training program is now being implemented, Tom Hussey, UM assistant vice president for business services, told the University Cabinet recently.

This level consists of 10 specialized, University system risk management training courses. The courses offered fill needs and have applications throughout the UM system and therefore will be conducted under UMca auspices, Hussey says.

The 10 courses are designed to address a variety of interest areas and to be useful to a large segment of University employees, both faculty and staff.

"Often faculty are assigned additional administrative duties. Administrative safety responsibilities are no exception," Stacey Clink, loss prevention manager in UMca business services, said. "Without faculty participation in courses, which help educate management in safety roles, the program will not be as effective as intended."

Many of the courses will also appeal to faculty and staff involved in specific areas

such as laboratory safety, office safety, and CPR (cardiopulmonary resuscitation).

Kicking off the program will be defensive driving courses, tentatively scheduled for this month in Kansas City and Columbia and next month for St. Louis and Rolla. Because of the wide applicability, the course is targeted to anyone who drives University vehicles on a regular basis.

A fire safety course scheduled for May 5 in Columbia will feature hands-on fire extinguisher practice.

These training courses are expected to reduce accident rates and associated costs to the University's self-insurance Workers' Compensation Program over the next several years, Hussey says.

"Employees who are well trained in the potential hazards associated with their work are more likely to avoid the hazards and save themselves from serious accident or injury," Clink says.

For more information on the risk management training courses contact Stacey Clink at 882-2705.

## UMKC Institute celebrates first year of serving community through research

"The Kansas City community has long thought of UMKC as a provider of quality education and as a resource for speakers and science fair judges . . . but failed to recognize us as a research institution. We intend to change that perception through the UMKC Institute," Henry Mitchell, UMKC associate vice chancellor for academic affairs and acting director of the institute, said during a recent interview.

"Through the institute, we can focus the community's attention on the research activities of the campus as a whole. At the same time, we can provide the community access to all research resources within the University. We can cut across all University units to facilitate access to quality researchers," Mitchell said.

A clearinghouse for campus research, the UMKC Institute was established in April 1982 to "provide private, public and not-for-profit communities with a specific contact point within the University for assistance in resolving social, economic, education and scientific problems." On its first anniversary, the institute shows signs of accomplishing its objectives.

By concentrating this first year on surveying the variety of researchers already available on the campus, many of whom have been involved in community research individually for years, the institute has begun to develop a portfolio of research opportunities available at the University. More than 160 individual faculty members have indicated an

interest in working cooperatively with the institute. In addition, when the institute was initiated, it incorporated several research units already operating on campus, including the Center for Aging Studies, the University Affiliated Facility for Developmental Disabilities and the Center for Labor Studies.

The institute has just launched a six-month campaign to increase community awareness of the institute and to assess community needs. Under the direction of Mitchell and Marilyn Harrington, UMKC director of dental hygiene and former ACE fellow in the Office of Academic Affairs, this campaign should result in not only more community business but also better matching of community needs and University resources.

The institute has a \$1 million budget, only 10 percent of which comes from the state and that is restricted to partial support of staff for research development and administration. All actual research work is supported by grants and contracts.

The research work currently being conducted under the auspices of the institute is as varied as the interests of the researchers and ranges from a microbiology study of cosmetic preparations to an area job market analysis.

In addition, a new community assistance program, the UMKC Faculty Community Service Fellowship program, is brokered through the institute. Initiated this year to provide the community access to specific faculty expertise and at the same time to allow

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CENTRAL ADMINISTRATION  
HAVENER JR., RALPH S.  
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James C. Summers



John T. Pelham



James H. Ollar

## Three new associate directors join cooperative extension service

The appointments of three associate directors of the Missouri Cooperative Extension Service were announced recently by Leonard Douglas, director of cooperative extension. The three are James C. Summers, director and program leader for research and program evaluation at West Virginia University's Center for Extension and Continuing Education; John T. Pelham, state 4-H leader with the Texas Agricultural Extension Service at Texas A&M University; and James H. Ollar, director of fiscal affairs and management for UM Extension.

Summers and Ollar began their new jobs April 1. Pelham starts May 15.

"I consider all three associate directors integral parts of the management team," Douglas said, when announcing the appointments. "Though each is assigned specific duties, the new associate directors are expected to exercise the skills and leadership necessary to carry out all aspects of the director's office. In addition, all three have specific responsibilities with Lincoln University concerning their assigned duties."

Summers was appointed to his latest position at West Virginia in 1980. Before that he was an extension specialist for eight years in WVU's research and development office. He has also been an associate professor of industrial relations at WVU since 1972.

Pelham has served as director of extension 4-H youth programs in Texas since 1976. Before that he worked four years as a staff development studies and training specialist with Texas agricultural extension. From 1969 to 1972 he taught sociology at Mississippi State University and for three years he worked as a research assistant with Texas A&M's sociology department.

Ollar joined UM Extension in 1967 as assistant to the director of administrative management. In 1970, he was appointed acting director of administrative management, and in 1972 he was named director of fiscal affairs and management.

Douglas announced the three appointments at the recent spring meeting of the State Advisory Council for Extension. The group of 27 extension lay leaders from around the state advises President James C. Olson on issues related to extension long-range planning.

During that meeting, Douglas reported on the progress of the three-year program adjustment plan established last year for Missouri Cooperative Extension. Plans are

proceeding for the realignment of the 21 extension areas in the state into nine regions. Seven of the nine regions have been formed, with regional directors appointed for those seven regions. An eighth region may be organized as early as next fall, Douglas said.

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### UMKC Institute

UMKC faculty the opportunity to interact professionally with the community outside the classroom, the fellowship program links four faculty members to the community in very specific ways.

Linda Breytspraak, associate sociology professor and gerontologist, will be on a half-time appointment with the Mid-America Regional Council during fall 1983 and is devoting half time this semester to a project in gerontology through UM extension.

Richard Dunlop, education professor, is on a full-time leave of absence this semester working on a cooperative project with the Metropolitan Ambulance Service Trust.

Peter Lott, chemistry professor, is spending half-time during this semester and next semester in research development with colleagues in the Regional Criminalistics Laboratory of the Kansas City, Mo. Police Department developing new fingerprinting techniques.

Eugene E. Eubanks, education school dean, will serve full time next fall as executive consultant to the superintendent of schools of the Kansas City, Mo. School District.

When fully developed and completely functioning, the institute should afford the campus a number of advantages, including better access to external clients and funding sources; more faculty and student involvement in industrial and community research

## University Cabinet meeting highlights

A summary of the subjects of the March 31 University Cabinet meeting follows:

• Progress on the Risk Management Training Program. Tom Hussey, UM assistant vice president for business services, described the safety training now underway for University employees. The general employee orientation, level I training, has been completed. Level II training will involve specialized risk-management training courses to be offered throughout the UM system.

• Weldon Spring review committee report. The cabinet discussed changes in procedures for awarding grants from the Weldon Spring Fund as recommended by the review committee. Revisions discussed include: creating permanent standing faculty committees to be involved in all phases of the campus selection and awarding procedure, changing the name of the Presidential Research Award to the Presidential Scholars Award, creating a mechanism for reporting the results of Weldon Spring research, and changing the funding process to include an equal minimum for

each campus, with the remainder distributed according to a criteria that takes into account campus research productivity. Any changes in the fund's operating procedure will be adopted by UM President James C. Olson and will take effect prior to the 1984 awards competition.

• Policy on the defense and protection of employees. The policy, which would provide defense for employees involved in law suits resulting from the execution of their duties as employees of the University, will be recommended to the Board of Curators in May.

• Archiving University records. The cabinet discussed a statement from the president outlining the University's obligations to archive University records, even when the documents are created in office automation systems.

• Indirect cost rates. Kent Shelton, UM assistant vice president for financial services, reported on the indirect cost rates being negotiated with federal officials for the campuses in the areas of research, instruction, and extension and public service.

and training programs; and perhaps most importantly, the ability to respond to extramural agencies quickly and completely.

### Public hearings scheduled on appropriations requests

UM President James C. Olson and his staff will be meeting with students, faculty, staff and the general public on the four campuses to discuss the campus appropriations requests for the 1984-85 fiscal year during the next several weeks.

The public hearing schedule follows:  
• UMR: 9 to 11 a.m., Thursday, April 21, Missouri Room University Center East;  
• UMSL: 1 to 3 p.m., Thursday, April 21, Hawthorne Room (Summit Lounge Level) University Center;

• UMC: 9 to 11 a.m., Friday, April 22, Room N-214 Memorial Union;

• UMKC: 9:30 to 11:30 a.m., Monday, May 2, Westport Room University Center. The time for the UMKC hearing was incorrectly listed as 1 to 3 p.m. in the March 31 issue of *Spectrum*.

Following the hearings, Olson and his staff, in consultation with the campus chancellors, will prepare a total recommended request for consideration by the Board of Curators later this summer.

### Emeritus titles awarded

The following emeritus titles were awarded by the UM system Board of Curators at its March 24-25 meeting.

• Paul H. Bowman, UMKC professor emeritus of psychology, effective Feb. 1, 1982;

• James W. Evans, UMKC professor emeritus of music, effective Sept. 1, 1982;

• Frederick R. McLeod, UMKC professor emeritus of English, effective Sept. 1, 1982;

• Mary McMann, UMKC associate professor emeritus of English, effective Sept. 1, 1982;

• Walter H. Murrish, UMKC professor emeritus of communication, effective Sept. 1, 1982;

• Constance Osgood, UMKC associate professor emeritus of sociology, effective Sept. 1, 1981;

• Marvin E. Revzin, UMKC professor and dean emeritus of dentistry, effective Jan. 1, 1983;

• Frank E. Wellman, UMC professor emeritus of education, effective Sept. 1, 1983; and

• Edwin J. Westermann, UMKC professor emeritus of history, effective Sept. 1, 1983.

## Jobs

The following administrative/professional and academic vacancies were listed with *Spectrum* as of April 8. Those interested in a position should contact the appropriate department of personnel office.

**UMC:** instructors, intensive English program, agronomy (2) physical therapy/HRP; instructor/asst./assoc./full professor, nursing-community health, nursing-child health; asst. professors, pharmacology (2), neurology, child health, fisheries, wildlife, political science, surgery; asst. professor, physics/condensed matter experimentalist; asst./assoc. professors, family and community medicine, finance, physics; asst./assoc./full professors, veterinary medicine and surgery (5), veterinary diagnostic laboratory; asst./assoc. professor, agronomy/state extension specialist-soybeans; assoc./full professor, medicine; assoc. dean for research and graduate studies, nursing; assoc. dean and professor, veterinary medicine; visiting asst. professor, statistics; visiting professor, management; coordinator,

continuing education-nursing; extension assistants, forestry, fisheries and wildlife, extension education; postdoctoral fellows, ophthalmology, biochemistry-Missouri Institute of Psychiatry (2); research associates, atmospheric science, dairy science, ophthalmology; specialist for media based instruction; asst. coach, women's basketball (2); assoc. director, counseling services; assoc. director, athletics; athletic trainer; computer programmer/analyst I; health physicist; information specialist; research specialist; sr. continuing education coordinator; student services adviser; student services coordinator; **UMca:** accountant; executive staff asst. I; marketing business manager; research chemist; research scientist;

**UMC Hospital:** administrative nurse I; asst. director, nursing; asst. manager, radiology; clinical nurse I; management analyst; manager, nutrition and dietetics; nurse anesthetist; quality assurance coordinator; staff pharmacist; supervisor, medical records;

**UMKC:** instructors, communications studies, nursing; instructor/asst. professor,

computer science; asst. professors, quantitative analysis, English, education; asst./assoc. professors, accounting (2), computer science (3), anesthesiology/pain control, endodontics, orthodontics, oral and maxillofacial surgery; asst./assoc./full professor, oral and maxillofacial surgery; assoc./full professor, marketing; professors, banking, theatre, theatre-acting, theatre-design; assoc. chairman/professor, theatre; director, computer science programs; asst. dean, continuing education-music; visiting professor, theatre; master designer-theatre; movement specialist, theatre; research asst., UMKC Institute; sr. research asst., UMKC Institute; coordinator, engineering services;

**UMR:** research asst. professor, physics; teaching fellow/engineering mechanics; housing manager; computer programmer/analyst II; scientific programmer/analyst;

**UMSL:** instructor/asst./assoc./full professor, management science and information systems; asst. professor, marketing; asst./assoc./full professor, accounting; dean, College of Arts and Sciences.

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