WU Faculty Receive State's 6 Guggenheims

Six WU faculty members have received fellowships from the John Simon Guggenheim Memorial Foundation. The six awards, the largest number presented to WU faculty in recent years, constitute all the Fellowships granted this year in the state of Missouri.

The recipients are: David H. Alpers, professor of medicine, WU School of Medicine; C. David Gutsche, professor of chemistry; Derek M. Hirst, associate professor of history; Paul Michael Lützeler, associate professor of German; Curtis A. Price, associate professor of music; and Richard Ruland, professor of English.

The fellowships are awarded on the basis of demonstrated accomplishment in the past and strong promise for the future in all of science, scholarship and the arts. A total of $5,099,000 was awarded to 288 scholars, scientists and artists chosen from 3,017 applicants to the Foundation's 57th annual competition. The average fellowship is $16,000.

Alpers is head of the Division of Gastroenterology at the WU School of Medicine. A specialist in the study of the stomach and intestinal tract, he is currently conducting research under a grant from the National Institutes of Health on intestinal protein metabolism and function. He will use the Guggenheim Fellowship to study post-translational processing of secretory proteins.

Gutsche, a member of the WU faculty since 1947, served as chairman of the Department of Chemistry from 1970 to 1976. During his last year as chairman, he received a faculty award from the WU Alumni Association for his outstanding commitment to teaching. A specialist in organic chemistry, Gutsche will use the fellowship to study the synthesis, characterization and testing of enzyme models.

Recognized as one of the leading authorities on political conflict in 17th-century England, Hirst will use his Guggenheim Fellowship to research and write a book on the role of the major-generals in Cromwellian England. Another volume by

Go-Ahead Given for Design of New Sports-Recreation Complex

The executive committee of the WU Board of Trustees approved a proposal at its April 9 meeting to proceed with the preliminary design of a new sports and recreation complex.

The sports and recreation complex will be designed and planned for students, faculty and staff use and will include three regulation-size basketball courts, handball, racquetball and squash courts and a new swimming pool. The basketball courts will also be available for indoor tennis.

The architectural firm chosen to prepare the preliminary plans also will develop plans to improve Francis Field House and Francis Field. These plans will include renovation and new construction of Francis Field stands.

According to Joe F. Evans, associate vice chancellor for business affairs, the decision to proceed on the athletic expansion program reflects the University's commitment to establish more activity-related programs for students.

Evans said that funds are available now to begin the architectural studies and to complete a portion of the project.

Planning for the complex began in 1978, when the architectural firm of Hastings and Chivetta of St. Louis submitted a proposal recommending significant improvements of sports and recreational facilities at WU. A year

WU intramural basketball will be one beneficiary of the new sports complex.
High Oil Content of Unusual Seeds May Be Future Energy Source

Money may not grow on trees, but scientists have discovered that oil, in many forms, does.

Processed oil from the seeds of certain trees and plants could become a major renewable energy source, says Eugene B. Shultz Jr., WU professor of technology and human affairs (THA), and coordinator of a wide-scale feasibility study on the oilseed energy concept.

"How soon it's going to happen, we don't know," says Shultz. "The whole thing depends heavily on the price of petroleum oil, which continues to escalate faster than the price of vegetable oils."

Shultz cautions that the technology to recover and process oil from the seeds of such little-known trees and plants as the Chinese tallow tree, the buffalo gourd and the neem tree, is far from completed. But, he says, it is possible that these trees and plants could have a substantial impact on the ability of many countries, especially developing ones, to meet their energy needs. Shultz, together with THA colleagues Robert P. Morgan, chairman, and William P. Darby, associate professor, are studying the potential use of seed oils as both diesel fuel extenders and firewood replacement, in addition to the industrial applications of unusual chemicals in certain seeds.

This is a new approach to utilizing renewable resources, says Shultz, adding that practical experiments are already underway.

Using vegetable oils for energy, though, raises a controversial question: Should farmland be saved only for food, and not fuel?"

"One reason we're concentrating on unconventional oilseeds is that most will grow on marginal lands where farming is not practical," says Shultz. He points out that the Chinese tallow tree has sprung up wild by the thousands along the Texas gulf coast where the intrusion of salt water has made most plant life nearly impossible.

The tree produces a white, waxy berry with a thin, edible coating similar to cocoa butter. Shultz says oil from the pulp inside contains two rare fatty acids, which he speculates may have industrial uses in new types of polyesters and other polymers, synthetic lubricants, bactericides and fungicides. Up to 12 barrels of oil can be harvested from one acre of the trees.

The buffalo gourd, native to the southwestern United States and Mexico, also grows well under marginal conditions. Not only do the seeds found in its round, green-and-white-striped gourds contain up to 40 percent oil, but a substance similar to potato starch can be extracted from its root.

If the starch is converted to alcohol, one acre of the plants can produce 400 gallons—an alcohol yield equal to that of sugar cane and much higher than corn. Yet the buffalo gourd requires less moisture than either.

More research, including environmental studies, still needs to be done, Shultz says. Whether dry, wet, hilly, or saline—marginal lands are fragile ecosystems, and poor cropping practices could jeopardize them. Shultz hopes, though, that oilseeds grown and crushed at the village level could be a major energy boost in areas like Kenya, India and Tanzania, where fuelwood shortages have reached a critical point.

Another area of focus is the southeastern U.S., where the soil is low in nutrients. Oilseed crops could revitalize small farming and related rural businesses there, Shultz believes.

Students Welcome Inner Growth From Rugged, African Experience

Four students will share in intense and undoubtedly memorable experience this summer when they spend six to eight weeks in various African countries under the Operations Crossroads Africa program.

The four, the largest number of WU students to participate in the program, are Prasanta Chettri, a junior in sociology from Belleville, Ill.; Wanda Gardner, a junior in sociology and international development from Rahway, N.J.; Marzanna (Marzi) Siekierski, a sophomore from Milford, Conn., and Albert Walls, a junior in civil engineering from Baltimore, Md.

Since its founding in 1958, Operations Crossroads Africa, based in New York City, has sent more than 5200 Americans to some 30 African countries to spend the summer working several hours a day with African volunteers on construction and agricultural projects. The program, which was the model for the Peace Corps, requires participants to live communally in rugged, rural conditions without electricity or running water. The challenging program also stresses contact among visiting Americans and native Africans, "a corrective," according to its literature, "to the historical imbalance of visitors taking more from African people than they give."

Gardner, who is considering medicine as a career, hopes to teach hygiene and health care in either Zimbabwe or Botswana. There, she believes she will learn as much as she imparts.

"I grew up believing in Africa the way it was portrayed on television," said Gardner, who is black. "Now, however, I think of Africa as a place where I might have been raised."

Gardner is not worried about living without the amenities of running water and electricity. "Where I was born in rural South Carolina, these conveniences also did not exist, and I guess I can experience it again."

Walls' own false images of Africa were dispelled by his past and current roommates from the Republic of South Africa, the Ivory Coast and Uganda. Intrigued by their stories about politically troubled southern Africa, Walls requested to be sent to Lesotho, a small, independent nation surrounded by the minority-ruled South Africa. Adjusting to the poverty-stricken lifestyle of that country will be "a learning experience," Walls said, "and an opportunity to interact. I am disappointed by the individualistic, non-helping attitudes of people in the United States. I hope to find there a group of people who want to accomplish something useful together."

When asked whether he was nervous about going to such a troubled part of the world, he replied, "I guess I have a little of the adventurer in me."

Siekierski has wanted to go to Africa for over a year. Because of her interest in rural medicine, she requested that
Guggenheim—continued from p.1

Hirst, Authority and Conflict: England, 1603-1658, will be published next fall. In 1978 he helped arrange an international conference at WU entitled “Law and Liberty,” which commemorated the 350th anniversary of the English Petition of Right. He also served on a WU committee to form an undergraduate program on “Law, Liberty and Justice.”

Lutzeler will use his Guggenheim Fellowship to complete research and writing on a definitive biography of the late 20th-century novelist Hermann Broch, who has recently been “rediscovered.” Lutzeler recently completed the editing of a 17-volume critical edition of Broch’s writings entitled Hermann Broch, His Collected Works. In 1973, he published his first book on Broch, which was widely acclaimed because it presented a major new interpretation of this noted author. It is entitled, Hermann Broch, Ethics and Politics: Studies on the Early Work and on the Novel Trilogy, “The Sleep Walkers.”

Price’s research interest is the music of the late 17th-century English theatre. His compilation of a 12,000-entry catalogue of all known sources of English instrumental music of that period has resulted in numerous articles on the failure of Restoration musical plays to evolve into true opera and the influence of theatre politics on English drama. He has also written a book, Music in the Restoration Theatre. Price will study the theatre music of 17th-century composer Henry Purcell with his Guggenheim Fellowship.

Ruland is currently serving as Visiting Professor of English at the College of William and Mary. He will use his Guggenheim Fellowship to complete work on a book concerned with British backgrounds of American literature. A perennial prize winner, Ruland previously received two Fulbright-Hays Fellowships to lecture abroad. He is the author of five books, the most recent of which is A Storied Land: Theories of American Literature, Vol. II, published in 1976.

Phi Beta Kappa, Sigma Xi Plan Initiations for New Members

William Arrowsmith, professor of classics and humanities at Johns Hopkins University, will deliver the annual Phi Beta Kappa/Sigma Xi Lecture at 11 a.m. Wednesday, April 22, in Graham Chapel. His talk will be on “The Poem as Palimpsest: T.S. Eliot’s Lune de Miel.” Special recognition will also be given at the lecture to retiring professor emeritus of German Lislott Dieckmann, a member of the WU faculty since 1944 and former chairman of the German department.

Arrowsmith, a wide-ranging scholar of letters, has translated numerous classic Greek, Latin and Italian works and written essays on Greek drama, Italian fiction, American Indian writing, and the role of the humanities in graduate education. He also writes poetry and fiction.

New members of Phi Beta Kappa, superior undergraduates in the arts and sciences, will be initiated formally at 4:30 p.m. Thursday, May 21, in Steinberg Auditorium. Burton M. Wheeler, professor of English and religious studies and president-elect of the WU Chapter of Phi Beta Kappa, will be the speaker.

New members of Sigma Xi, a prestigious scientific research society, will be initiated at private ceremonies following Wednesday’s lecture. Sigma Xi initiates include undergraduate and graduate students, as well as post-doctoral fellows and young faculty members.

Phi Beta Kappa members-elect are:

Elected to full membership

Shen-Liang Chang
James A. Delmez
Deborah T. Haimo
Hai Huang
Marija Ilinc-Spong
Judith L. Lauter
Paula Lundberg

Nouha Salibi
Mark A. Shayan
Isolda E. Thalmann
Keh Wen Whang
Wen-Pao Wu

Elected to associate membership

Craig T. Bason
Anandkumar P. Bhate

Saul E. Novick
Mark A. Johnson
Jonathan D. Kent
Stephen Leonhardt
Dule M. Pitt
Gail E. Wagner

Promoted to full membership

Kye J. Han
Patricia A. Jacobberger

Cleveland Marketing Expert to Give Lecture

A Cleveland marketing expert, B. Charles Ames, president and chief executive officer of the Acme-Cleveland Corp., will deliver the second in an annual series of lectures sponsored by the Kellwood Co. of St. Louis on Wednesday evening, April 22, at the Whittemore House.

Ames will speak on “Strategic Planning for Industrial Companies: Key to Profit Growth” at a 6:45 p.m. dinner for marketing executives in the St. Louis area. The event is being planned by the marketing faculty of the WU School of Business Administration.

Ames will discuss marketing concepts with students earlier in the day from 1 to 2:30 p.m. in the courtroom of Mudd Hall.
Friday, April 17
9 a.m. Mortar Board Symposium, "Is There Life After College?" Discussion on related topics will be held throughout the morning by WU staff, students and alumni. Ann Whitney Olin Women's Bldg. Lounge.

2 p.m. Technology and Human Affairs Seminar, "Organic Farming in the Cornbelt," Daniel H. Kohl, WU prof. of biology and sr. fellow, CNBS, 104, La Porta.


Saturday, April 18

2 p.m. Department of Chemical Engineering Seminar, "Multiphase Block Copolymers," M. C. Williams, dept. of chemical eng., U. of Calif., Berkeley. 100 Cupples II.

4 p.m. Department of Biology Seminar, "Genetic Studies of Sciolotrium Rolfsii," James Maniotis, WU prof. of biology. 322

Monday, April 20
12 noon, Department of Genetics Lecture, "Analysis of the Human Lecture,


11:30 a.m. Department of Civil Engineering Seminar, "Genetic Studies of Sciolotrium Rolfsii," James Maniotis, WU prof. of biology. 322

Tuesday, April 21


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