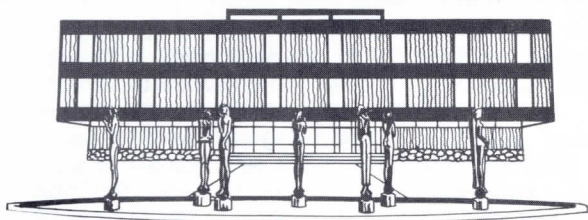


OAKLAND UNIVERSITY NEWS



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A publication for faculty, staff and friends

Three Education Programs Receive \$725,000

Chrysler and the United Auto Workers/Chrysler have funded three continuing education programs for a total of \$725,000, according to Gerald J. Pine, dean of the School of Human and Educational Services.

"The programs benefit all parties and are examples of the cooperation that should exist between a university and the business and industrial community," Pine says.

The three components receiving funding are:

- A staff development program for Chrysler technical instructors, training supervisors and plant administrators of training programs. The total cost will be \$300,000 through December 1987 with training conducted by faculty members of the Department of Human Resource Development in SHES through the Division of Continuing Education.

- A joint UAW/Chrysler program that is funded at \$198,000 for hazardous substance education and training. The project is a collaboration between the SHES human resource development faculty, the Ken Morris Labor Studies Center, the Program in Industrial Health and Safety, and the Department of Chemistry in the College of Arts and Sciences.

ris Labor Studies Center, the Program in Industrial Health and Safety, and the Department of Chemistry in the College of Arts and Sciences.

- A pilot program for the UAW/Chrysler, initiated by the Continuum Center, to design, implement and monitor a joint skill development and training center. Planners will be trained to help implement the educational and training goals of the recent UAW-Chrysler contract. The 18-month program is funded for \$227,262.

Pine says the first program should serve as a national model for university-corporate collaboration. From the inception of the project, Chrysler and university representatives have worked as a single team to design and implement a full-year program of courses. The team met frequently in planning sessions before the first course was ever offered.

During 1985-86, 128 Chrysler training instructors and 34 plant training administrators participated in 8,450 hours of course work. During 1987, 126 instructors and 74

plant managers are scheduled for 10,000 hours of professional development work.

The two UAW/Chrysler programs are just under way. In one, HRD faculty members cooperate with Paul Tomboulis, chairperson of the Department of Chemistry; Richard Rozek, School of Health Sciences; and personnel in the Ken Morris Labor Studies Center. The goal is to train 156 UAW/Chrysler safety and training administrators who will be prepared to deliver the

program on hazardous substance education to personnel in Chrysler plants across America.

Continuum Center Director Elinor Waters is responsible for development of the joint skill development and training center. Education and training counselors will help plant workers obtain their educational benefits. The additional skills will aid workers and management.

Researcher Receives \$470,000 to Study Hormone Function

Steroid hormones and their use or misuse have received wide publicity in the Western press, but much remains to be learned about how they govern our bodily functions, a researcher maintains.

Virinder K. Moudgil, biological sciences, an acknowledged expert on the female hormone progesterone, has received a

\$470,000 four-year grant from the National Institutes of Health to continue his study of progesterone action.

"The hormone plays a key role in the regulation of menstruation, reproduction, and pregnancy and its absence leads to several known maladies," Moudgil says. "Recently it has been implicated in the development of cancers of uterus and breast." Progesterone is also the key component of the oral contraceptive pills.

Moudgil says that "the precise mechanism by which progesterone and other steroid hormones bring their effects is not clearly understood. It is of vital importance to understand how our bodily functions are governed by hormones and to understand how we can control them and use them with precision to avoid undesirable side effects."

Steroid hormones are used by athletes to build strength, but they are gaining wider use for treatment of hormone-related disorders like infertility and bone loss.

"We do know that steroid hormones initially bind with receptor proteins in the target tissues and that this steroid-receptor complex influences the functioning of hormone-responsive genes in the chromosomes," Moudgil adds.

Doctor Discovers Heaven with Astronomy Class

"If only he were enthusiastic about his work" is one comment you won't hear about Dr. Bryan Shumaker.

The urologist by day, astronomer by night is reviving the almost-forgotten campus observatory. Along with six students in his Observational Astronomy class, the energetic Dr. Shumaker has restored the

telescopes and cleaned up the observatory for this semester's class.

"It's beginning to look like an observatory," he says. Shumaker, who describes himself as an "avid amateur" astronomer, quickly becomes excited when talking about the observatory. His enthusiasm spreads quickly because, he adds, he

teaches out of love for the subject. It's his hope that the observatory will once again be used on a regular basis, preferably through an astronomy class.

Over the past few weeks, the assistant adjunct professor in the Department of Physics has rounded up all the telescopes and parts that had been borrowed and found their way to various offices. With the help of his students and campus maintenance personnel, the observatory was "dewasped," he says, and thoroughly cleaned. The Physics Club helped by fixing the pulley system that opens the roof.

"In the past it was used a little, then abandoned, then used a little, and then abandoned," Dr. Shumaker says. "It fell into disrepair."

Dr. Shumaker came to OU as an instructor in a roundabout manner. As a urologist, he uses lasers and was a guest lecturer to explain their applications. Also, he became friends with Fred Hetzel of the department when both worked at Ford Hospital. Hetzel suggested he bring his astronomical talents to OU and one thing led to another.

The astronomer is serious about his hobby. He first got interested in astronomy at age 13 when he helped an uncle build a telescope. About five or six years ago, he renewed his interest. Since then he has published several articles about astronomy, including one about Halley's Comet that appeared in *Popular Science* magazine. He also spoke at the OU Comet Night program last fall.

The observatory has nearly 10 reflector and refractor telescopes. "I'd like to see them used, instead of being filled with spiders and insects," the doctor says.

Dr. Bryan Shumaker, left, works with students at the observatory. The Pontiac urologist is teaching students this semester through the physics department. Dr. Shumaker and his six students cleaned the observatory and got the telescopes back into working order. Photo by Peter Banks.



Detroit Collections at Gallery

Meadow Brook Art Gallery opens its 1986-87 exhibition season with *Detroiters Collect: New Generation* from October 5-November 9.

All works in the exhibit were produced from 1975-85 and are representative of 31 artists from 30 collections in the Detroit area. Many artists reflect current trends with a strong revival of imagery in their expression, such as James Brown, Italo Scanga, T.L. Solien, Robert Stackhouse, Pat Steir and Terry Winters. They represent a younger generation of American artists.

Viewers will also discover relatively unknown artists from international backgrounds, such as exiled Russian artist Oleg Tselkov, French painter Claude Viallat, Japanese environmentalist Tadashi Kawamata, British figurative sculptor Antony Gormley, and German abstract expressionist Walter Stohr.

Former Detroit residents, now living in New York, represented in the exhibition are Tom Bills, Brenda Goodman, Gary Mayer, Ellen Phelan, David Barr, Charles McGee and Gordon Newton, who still works in Detroit.

The free opening reception will be from 3-5 p.m. October 5 and is open to everyone. Regular exhibit hours are 1-5 p.m. Tuesday-Friday, 2-6:30 p.m. Saturday and Sunday, and 7 p.m. through the first intermission of Meadow Brook Theatre performances.

Our People

Got down brief notes about your comings and goings and send them to the News Service, 109 NFH. All employees may do so. Items are published as space becomes available.

•Carl F. Barnes, Jr., Center for the Arts, addressed a conference of 40 Oakland County art curriculum directors and school district principals on the roles of the Center for the Arts and the Department of Music, Theatre and Dance in participating in outreach programs in the arts. The conference was sponsored by Oakland Schools, the center's partner in the annual Arts-for-Youth Camps and other arts programs for children.

•Lyle Nordstrom, music, theatre and dance, presented a paper, *Four Decades of 'Lessons for Consort,' a Study in Style*, at the International Lute Symposium in Utrecht, Holland. The symposium was part of the Utrecht Early Music Festival, the largest early music festival in Europe. The symposium brought approximately 120 scholars and performers together from over 20 countries, making it the largest such symposium ever held. Nordstrom was one of only eight performers asked to give a master class. Nordstrom's paper will be published as part of the proceedings of the symposium.

•David Cooper, Ken Morris Labor Studies Center, is coauthor of a recently published book, *United States Studies and Studies in Connection with the Bilateral Relationship Between the United States and Mexico*. The book has been published by the National School of Professional Studies of the National Autonomous University of Mexico.

•Steve Carryer, music, theatre and

dance, performed with his Detroit Jazz Guitar Ensemble at the Detroit-Montreux Jazz Festival in Detroit. Ensemble members with Carryer are former OU jazz guitar instructor Ron English, Robert Troy, former OU students Tim Flaharty and Randy Herkness. Also performing were John Dana on bass and Mark Lipson on drums. It was the first time the group has performed at the festival. Carryer is now working on publishing his library of guitar ensemble charts. Carryer teaches jazz guitar at OU and directs a similar student ensemble.

•Several persons from OU participated in the third annual Detroit Area Black Family Conference. The daylong event at the Downtown Detroit YWCA was sponsored by the Ken Morris Labor Studies Center and the Coalition of Black Trade Unionists Women's Committee. Presenters included Johnetta Brazzell, placement and career services; and Symantha Myrick and David Cooper, labor studies center. In addition, planning committee members included Myrick and Karl Gregory, business administration.

•Jane Briggs-Bunting, journalism, will conduct a workshop on *Writing for National Magazines* at the 25th annual Writer's Conference sponsored by the Division of Continuing Education and Detroit Women Writers. Briggs-Bunting will recap what it takes to break into a national writing market and the realities of the Manhattan bias when it regards the Midwest. Also covered will be copyright, dangers of libel and privacy suits, and how to protect yourself as a free-lance writer. The conference is from October 17-18 on campus.

Funding Opportunities

Information about sources of external funding is available from the Office of Research and Academic Development, 370 SFH, or by calling 370-3222. Unless indicated, proposal due dates are unknown.

National Endowment for the Humanities

Improving the preparation of teachers in the humanities, March 15; improving introductory courses in undergraduate education, October 1; promoting excellence in a field, October 1; summer seminars for college teachers, participants and directors, March 1; summer seminars for secondary school teachers, participants and directors, March 1; summer stipends, October 1; travel to collections, January 15; and younger scholars program, November 1

National Cancer Institute

Reduction in avoidable mortality from cancers, December 12, with letter of intent to apply due October 31.

National Institute of Child Health and Human Development

Reproductive Sciences Branch: reproductive disorders in women, February 16.

U.S. Department of Interior

Water resources grant program, January 9.

National Institute on Alcohol Abuse and Alcoholism

Genetics research on alcoholism, February 1 and June 1.

National Institute on Drug Abuse

Nosology of drug dependence, February 1 and June 1.

National Institute of Environmental Health Sciences

Acid rain studies: air pollutant interactions, December 1; adverse health effects of aluminum, December 1; and epidemiologic studies, February 16.

National Institutes of Health

Division of Research Resources: minority high school student research apprentice program, December 1.

New Faces

Additions to the university staff include the following persons, according to the Employee Relations Department.

•Patricia Bergh of Troy, East Campus business manager in the Budget Office.

•Jill Dunphy of Birmingham, coordinator of special projects in University Relations.

•Jennifer Edison of Dearborn, curator of slides in the Department of Art and Art History.

•Linda Frizzle of Clarkston, an apprentice in Food Service.

•Patricia Anne Gries of Bloomfield Hills, a counselor/trainer in the Continuum Center.

•David Loyd of Pontiac, an apprentice in Food Service.

•Mary Lynn of Pontiac, an apprentice in Food Service.

•Ruby Lynn of Pontiac, an apprentice in Food Service.

•Jacqueline McCarroll of Rochester Hills, a counselor/trainer in the Continuum Center.

•Vern G. Messervey of Union Lake, an apprentice in Food Service.

•Brian Munson of Bloomfield Hills, an officer in the Department of Public Safety.

•Dianne O'Krog of Rochester, an apprentice in Food Service.

•Kathleen M. Ostentoski of Dryden, a reproduction machine operator in Mimeo and Reproduction.

•Michelle Pagel of Oxford, an accounting clerk IV in Cashier.

•Catherine Rogg of Oak Park, a senior executive secretary in the Office of the Board of Trustees.

•Rhonda Saunders of Clarkston, a secretary I in the Employee Relations Department.

•Janet Sheldon of Pontiac, an apprentice in Food Service.

•Ann Stemas of Rochester, a secretary I in ERD.

Jobs

For information about job opportunities, call the Employee Relations Department at 370-3480 or visit 140 NFH.

•Accounting clerk III, C-7, Accounting Office.

•Financial aid adviser, AP-6, Office of Financial Aid.

•Admissions adviser, AP-6, Office of Admissions and Scholarships.

•Library technician I, C-6, Kresge Library.

Monthly Award Cites Outstanding Employee

A recognition program has been announced by the Employee Relations Department to honor an outstanding employee each month.

Larry Sanders, personnel specialist/compensation analyst for ERD, said the recognition program has been established to publicly recognize and reward contributions of outstanding individuals from all nonfaculty, nonprobationary employee groups who reflect involvement in and for the benefit of OU.

The Employee Recognition Award will be given monthly to a deserving employee based on nomination forms received by ERD. A committee of staff members from the various employee groups will review all nominations each month and select a recipient. Each recipient will receive a dinner certificate for two that will be honored at over 25 restaurants in the Oakland County area, an imprinted memo folder, a coffee mug, an

award certificate, a congratulatory memo from President Joseph E. Champagne, recognition in the *Oakland University News*, and a banner display in the Oakland Center announcing the monthly recipient. In addition, each recipient and a guest will be invited to attend an annual Employee Recognition Award dinner at Meadow Brook Hall with President Champagne.

Nomination forms and selection criteria (intended to serve as guidelines to aid in the nominating process) are now available to all departments.

Although faculty members are ineligible, they may nominate any nonfaculty, nonprobationary employee they think is deserving of the award. Any OU employee may nominate any other eligible employee. The nominating procedure is not limited to people in their respective departments or employee classification.

For information, call Larry Sanders at 370-3476 or David Strubler at 370-3480.

All Hail King Richard

The spectacular saga of a diabolical hunchback king who schemes and murders his way to the throne opens at Meadow Brook Theatre at 8 p.m. October 9.

Shakespeare's *Richard III* stars Tom Spackman in the title role and Gregg Almquist as the Duke of Buckingham. Director Charles Nolte is familiar to Meadow Brook audiences for his adaptation of *A Christmas Carol* and many other hits. Nolte is a theatre professor at the University of Minnesota and artistic director of its University Theatres.

Spackman, a winner of the New York press critics' award, is a former Detroit resident whose first professional acting appearance was in *Little Foxes* at Meadow Brook. This will be his 15th appearance at Meadow Brook. This past season, Spackman was seen in the New York Shakespeare Festival's production of *Rum and Coke*. He is currently on leave from his role as George Carruthers in *Another World* and has also appeared in *The Guiding Light*.

Almquist acted in *I'm Not Rappaport* on Broadway. He is seen in the film *Heartburn* and commercials for Alka Seltzer, Amana, Crest and AT&T. He appeared in *Long Day's Journey into Night* at Meadow Brook three years ago.

Dona Werner plays Lady Anne Neville, the eventual queen to Richard III. She first appeared at Meadow Brook in *Romeo and Juliet* and is a featured actress at the Guthrie Theatre in Minneapolis. She also acted in *The Miser* and *The Good Doctor* at Meadow Brook.

Richard III will run through November 2.



Tom Spackman and Dona Werner lead the way in 'Richard III' at Meadow Brook Theatre. The theatre opens its 21st season October 9. Tickets are available by calling the box office at 370-3300.

Season tickets are available at a 20 percent savings from single ticket prices. For tickets, call the Meadow Brook Theatre box office at 370-3300.

Lecture with Sonya Friedman to Benefit Physical Therapy

Author Sonya Friedman will lecture at the first benefit for the Physical Therapy Research Fund on October 26 at Meadow Brook Hall.

Friedman, author of *Tough Cookies Don't Crumble* and *A Hero is More than Just a Sandwich*, will lecture with Osa Jackson, director of the physical therapy program, on *Is Your Job Eating You Up?*

The program will begin at 6 p.m. with a reception and tour of Meadow Brook Hall. Following the 7 p.m. lecture, there will be an autograph session and refreshments. Copies of Friedman's book will be available. Friedman is also an adjunct assistant professor of health sciences at OU.

Suggested donations of \$25 are tax deductible and will be used to support the Physical Therapy Research Fund. Proceeds of the fund are used to provide seed money for faculty members, clinical educators, students and alumni to enhance their chances for receiving major research grants.

The physical therapy program is "now mature and ready to openly focus on the research component in a formal way. The strength of any physical therapy program is measured by the clinical competency of each of the physical therapy graduates," Jackson said.

"It is with great pride that we acknowledge

that the class of 1985 ranked seventh overall out of 85 schools who were tested using the standardized PES state licensure examination. There have been three students who have had their research accepted for presentation at the 1986 Michigan Physical Therapy Fall Conference."

The director says a goal of the program is to establish a biomechanics laboratory for clinical research, and a specialty consultation service for all area clinicians in need of a comprehensive movement analysis to solve a clinical problem.

The research fund was established by Linda Albright, Myrna Partridge of the Work-out Company, Wright & Filippis supply company, Joel Russell, Art Griggs, Chris Pillow, Pam Hilbers, Cathy Larson, Elizabeth Ross and Jackson.

For additional details, call 370-4043.

Like Roast Lion?

This year's basketball fund raiser for the Department of Athletics will have a football touch by honoring former Detroit Lion Doug English.

The event, *An Evening with Doug English and Friends*, will be November 6 to benefit men's and women's basketball. For tickets, call 370-3190.

Detailing the magical healing practices of the lesser known Otomi Indians in Mexico has provided an anthropologist with a look at a tribe that predates the Aztecs.

"Most of the Indians of the central plateau have not received much attention," explains anthropology Professor James Dow. "There's been much greater interest in the Mayan Indians, especially in the United States, but they've been overstudied in comparison to other groups."

Many traits of modern Indian culture come from the Otomis, Dow says, which makes them an important resource. One aspect of the Otomi culture is shamanism, or faith healing. Dow has documented their practices in his book, *The Shaman's Touch: Otomi Indian Symbolic Healing*, published recently by the University of Utah Press.

The Otomis and other tribes compose millions of Mexico City area residents. Generally the Otomis are poor; many live in rural homes with dirt floors.

In studying the Otomis since 1968, Dow has concentrated on community religions, economics and ecology. "My work with shamans sort of filled in the gap," he says. "I went back to the region because there was a great interest in shamans and these people had practicing shamans who were very traditional in their orientations. They were one of the few Mexican Indian groups with an intact native religion with practicing shamans."

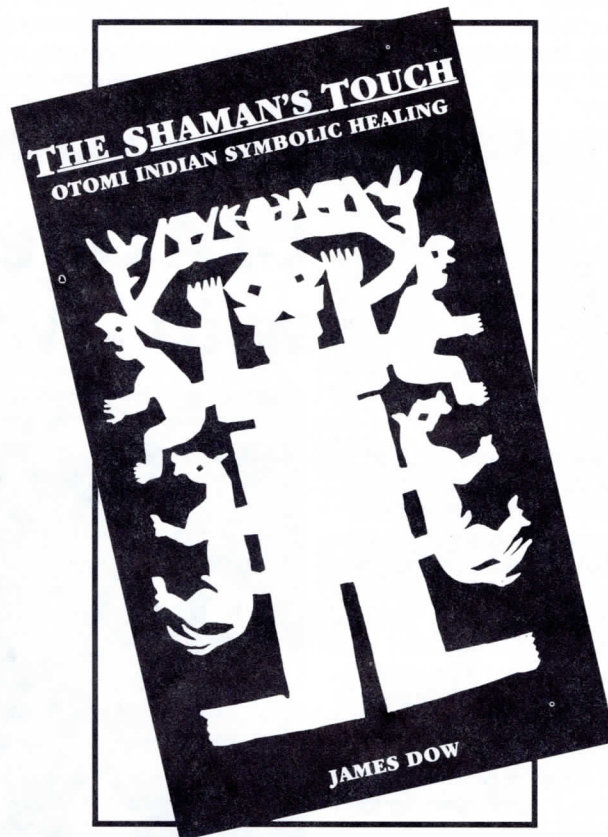
Shamans specialize in curing diseases but also can calm people, make them fall in love, find lost animals and do other magical things.

"Most of the work of shamans is curing diseases," Dow says. Shamans believe in both good and bad diseases. Good diseases are caused by God and the bad are brought on by sorcery. "The good diseases are not the business of shamans, they can be dealt with by doctors and medicines," Dow relates.

"The bad diseases are not sent by God but are caused by evil human beings. Shamans are in constant war with sorcerers. They believe strongly that there are hundreds of sorcerers in the world. For every good shaman, there may be 50 sorcerers out there."

The shaman is not a priest because he does not answer to a church hierarchy, but he may be a pastor in that others follow him. Some believe their powers

Study Reveals Interesting Beliefs in Shamanism



come to them at birth but others answer a calling and study shamanism in earnest. Shamans are close to the people, on call always and usually quite busy.

Dow interviewed Don Antonio, a shaman, who provides lengthy glimpses of his life and his beliefs. The shaman has elaborate ceremonies with candles, censers and even paper dolls to divine what evil has struck a patient. During these ceremonies, however, God may reveal to the shaman a specific time for the patient to die. In one conversation, Antonio revealed that he knows he cannot cure people if it is God's will that they die.

The Otomis, who have access to modern medicine and culture, believe in shamans, Dow says, just as Americans believe in nontraditional methods when they put their faith in questionable doctors and practices.

"The shaman provides psychological and symbolic healing, which does have its physiological effects. The shaman deals with a lot of cases that modern medicine doesn't want to deal with," Dow explains.

Charlatan shamans are not necessarily a problem. "The natives know. The good shamans do the right thing, people get cured and they feel good and they get relieved of their anxiety. The charlatans bumble around and mess things up," Dow explains.

Dow's study has been exclusively with the Otomis. Their shamans differ from shamans found in other cultures, such as those of the Far East studied by Philip Singer, also of the Department of Anthropology and Sociology.

"I think that according to my theory of how shamanism works, they all use a similar symbolic technique. But cultures differ greatly in their myths and the symbols they use," Dow says. "If you look at the surface of magical healing in different cultures, you'll see quite a different set of symbols, but underneath I do believe there are similar patterns."

Dow sees parallels between shamanism and the psychiatric and religious healing practices found in American culture. Just as there are good doctors and religious leaders, there are also bad healers and bad spiritual advisers — and bad shamans.

Dow's book, with its descriptive, easy-to-read passages, is available at the Bookcenter.

Students Benefit from Statistics Laboratory

An investment by Ford Motor Co. in the future of OU students is paying dividends. A year ago the automaker provided funds to set up a statistics laboratory in O'Dowd Hall.

The lab with its 20 terminals allows students to do their class assignments much faster than was possible when they used the

OU is Host to Arts Conferences

The Center for the Arts was host to two statewide arts conferences in September.

The Michigan Alliance for Arts Education held a two-day summit meeting at Meadow Brook Hall on September 12-13. Heads of arts agencies throughout the state participated, as did Philip Runkel, state superintendent of instruction. Music critic Charles Fowler delivered the address.

The Lafayette String Quartet, the quartet in residence at OU, gave a recital after the Friday dinner.

On September 19-20, the Michigan Touring Arts Agency presented its Making Contact II Conference, bringing together presenters and clients from throughout Michigan.

Two university groups, the Mime Ensemble directed by T. Andrew Aston and Other Things & Co., directed by Carol Halsted, were featured in showcase presentations. A Reasonable Facsimile, an early music duo of former students Rob and Anne Burns, was also featured.

Both conferences were funded by the Michigan Council for the Arts.

Tickets on Sale for Town Hall

Looking for an interesting lunch date? Perhaps Zsa Zsa Gabor would fit the bill. The entertainer opens the 1986-87 Macomb Town Hall Lecture-Luncheon Series on October 22 for the benefit of the OU Scholarship Committee of Macomb County.

The series continues with Mort Crim, news anchor on WDIV-TV, on January 14, and a costume show on April 8 with the Meadow Brook Theatre Guild.

Tickets are available by calling 370-2240. Lectures will be at 11 a.m. at the Warren Chateau Hall, 6015 E. 10 Mile Road, Warren. During the past 25 years, the committee has raised over \$176,000 to benefit OU students from Macomb County.

central Honeywell Multics computer in Dodge Hall. Immediate response is only one benefit, however, says Professor Harvey Arnold, mathematical sciences. The Prime computer runs statistics software Ford provided, something the Honeywell computer cannot, and this gives students a practical means of doing lessons.

"Statistics programs to meet today's needs ought not to be only number crunching," Arnold says. "Students should also generate their own data. There's too much of a 'here's some data, now analyze it' approach. The big problem with good statistical studies is that often the data is not well-collected in the first place. I think that aspect of statistics training is totally missing."

The professor adds that "to actually have students in there, collecting data and designing a data collection scheme and actually working through the usual problems a business has, and realizing not all data is

nice bell shaped, makes them well aware of the practical problems and concepts."

Associate Professor Louis J. Nachman designed the lab and obtained the required matching funds to the Ford gift. Nachman's contract is for consulting work with

Quick Computer Response One of the Advantages

computer-aided design systems. In his work, Nachman updates mathematics models for CAD systems used in curve and surface representation programs.

Several faculty members also work with Nachman, but as yet no students are involved. Nachman said Ford donated CAD software for the lab.

Students may use the lab 10 hours a day Monday-Friday and five hours on Saturday.



Associate Professor Louis J. Nachman is proud of the new statistics laboratory.

Professors Act to Ease African Famine

Four faculty members from different disciplines are working to help Africans overcome food shortages and become food producers.

Their goal is to aid residents of the Njombe District in Tanzania by introducing soybeans as a source of protein. James Graham, history, heads the project through the non-profit Soytec Research Foundation of Rochester. Foundation cofounders are Vincent Khapoya, political science; Robert Stern, chemistry; and Egbert Henry, biological sciences.

Graham has studied East Africa as an economic historian for years and has made several trips to the country, most recently this past spring. By viewing East African problems as a historian, Graham has concluded the problem is not only lack of food, but the inability of the local economy to provide the means to feed the people. Past efforts by the British and others to introduce soybeans as a food source failed for several reasons, including a lack of processing ability and the economic and social structure of the country.

"Within the past three years I've concentrated on a local soy processing industry as a possible answer to both of these problems," Graham says.

Although looking properly professorial in his O'Dowd Hall office, Graham begins to sound like "Gentleman Farmer Jim" as he rattles off facts about soybeans. He laughs a bit, realizing his knowledge of the bean is now extensive.

"It was used almost 5,000 years ago in China and was called the miracle bean," Graham begins. "It's nature's best source of protein, 40 percent by weight. It's a good natural source of what we use for cooking oil; it's 20 percent polyunsaturated. When cooked it's tasteless, so it can be flavored in any way. It also has the property of being able to be textured in any way, so for half the world's population for thousands of years it has been the chief source of protein."

Versatile soybeans are grown in over 2,000 varieties, which assures compatibility with nearly any climate. Tanzanians would grow them with maize because the soybeans release nitrogen, therefore enriching the soil for both plants.

As Soytec's founders envision the project, Tanzanian women would grow soybeans and

process them in American-made extruders. The beans would also be mixed with the maize to form an enriched maize meal of 30 percent soybeans. It is important for women to learn the skills, Graham notes, because in that culture, men tend to the hard labor and the cash crops while women grow the beans. Extruding soybeans will bring a new element to the local economy by allowing women to be cash producers, too.

"It can be a spur to local development as well as a real help in providing people a proper amount of proteins in their daily diets," Graham says.

In explaining why past efforts to grow soybeans failed, Graham points to technology. "It takes a great deal of time to cook the soys to get the antinutritional inhibitors and enzymes out. Generally it takes three hours to cook the soys before you can use them for anything, and then you need to flavor them and texture them in any way you want. Processing hasn't generally been used because it takes a lot of time, it takes up a lot of firewood, and it occupies the women who are very busy."

The extruder Graham wants to send to Tanzania, however, would speed processing. "It's a low-cost, easy-to-run machine. I'm the last person to know anything about machinery, but I think I could take it apart and put it together again. It's a very simple machine that will process any kind of bean, grain or root crop. It cooks it and texturizes it in a matter of minutes," he says. "It's a relatively new technology that's been tried in at least 17 underdeveloped countries. It's usually been tried up to this point as a government-supported project aimed at providing better nutrition for children. It hasn't been set forth yet as an enterprise."

Processed beans have a long shelf life. "Once extruded, they can be kept for six months because they're precooked. They can be sent to other parts of the region or the country, which I think is a lot cheaper way of providing the people with protein than importing beef or something like that," Graham says.

The OU professors work with about 40 volunteers in the United States and Tanzania, including the minister for national education and scholars from the University of Dar es

Salaam and the Sokoine University of Agriculture.

Soytec seeks grants from nongovernmental sources to pay for its project; proposals have been sent to agencies and foundations in the United States and to the European Economic Community. The five-phase project from 1987-91 has a total estimated cost of \$645,504. If the pilot project succeeds, similar projects would be undertaken in other areas of the continent.

Assistance in preparing and sending the grant proposals has come from Pat Coleman and staff of the Office of Research and Academic Development, and the history department staff, Graham notes.

Graham says it is easier and quicker to grow soybeans than to develop the meager cattle, poultry and fishing industries for protein. Developing a protein source rapidly is essential. "In Tanzania, almost one of every four children dies before the age of 5, mostly from protein deficiency," he says.

The associate professor is hopeful about Soytec's future in easing famine conditions. "The idea is that if it works here, it can work anywhere in East Africa."

Anyone interested in learning more about the project may attend a lecture and slide presentation at 7:30 p.m. October 15 in the Oakland Center West Crockery. The lecture is sponsored by the Department of History.

CFA Offers Tantalizer with 'Sweeney Todd'



Tony Lucchi as the barber appears with Jerry Rathgeb and Peggy Thorp in 'Sweeney Todd.' The Center for the Arts is producing the play.

For those with a hearty appetite, the Oakland University Center for the Arts presents the tasteful thriller, *Sweeney Todd, The Demon Barber of Fleet Street*.

The play by C.G. Bond tells of the infamous barber who "shaves" his customers too close and then sends them to the ever-enterprising Mrs. Lovett, who makes savory meat pies.

Sweeney Todd stars senior Tony Lucchi in the title role and professional actress Peggy Thorp as pie-maker Mrs. Lovett.

Rounding out the cast of 12 are students and actors from the community. They are Stacy A. Bohlen, William Bratton, Walter Mark Hill, Tammy A. Machowicz, Senator O'Brien, Christopher Olszyn, K.G. Preston-Irvine, Jerry Rathgeb, Tim Sommerfeld and Ben Wood.

The play is directed by William P. Ward of the Department of Music, Theatre and Dance. T. Andrew Aston, also of the department, is lighting designer. Valerie Kyriakopoulos and Patricia Sutherland are assistants to the director and stage managers.

Sweeney Todd is known both as a play and as a musical. In 1979, the musical adaptation opened on Broadway with music and lyrics by Stephen Sondheim. Although not a commercial hit, the musical was a critical success and captured all of the major theatre awards for the 1978-79 season. Bond's original script does not contain any songs, but the plot, characters and situations did serve as the basis for Sondheim's work and are similar to those found in the somewhat more familiar musical version.

Sweeney Todd takes the Studio Theatre stage in Varner Hall at 8 p.m. Oct. 10-11, 17-18 and 24-25, and at 2 p.m. Oct. 12, 19 and 26. Tickets are \$7 general admission and \$3 for students and senior citizens.

Call the Center for the Arts box office at 370-3013 from 11 a.m.-5 p.m. weekdays for details.

Events

CULTURAL

October 9-November 2 — *Richard III* at Meadow Brook Theatre. For tickets, call 370-3300.

Every Tuesday — Arts-at-Noon recitals in Varner Recital Hall. Free. Call 370-3013 for details.

COURSES

October 17-18 — 25th annual Writer's Conference sponsored by the Division of Continuing Education and the Detroit Women Writers. Fee. Phone 370-3120.

The Division of Continuing Education offers fall classes. Call 370-3120.

ETCETERA

October 8 — Women of Oakland University, noon, 128-130 Oakland Center. Pam Beemer will speak. Everyone invited.

October 15 — Women of Oakland University, noon, 128-130 Oakland Center. John Savio will speak. Everyone invited.

October 15 — Graduate Study open house, 4-8 p.m., Oakland Center. Call 370-3360 for information.

October 20 — Physical Therapy Career Day, 10 a.m.-2 p.m. in the Oakland Center Crockery. Call Joyce Esterberg at 370-3213 for details.

LECTURES

October 14 — Author John Naisbitt, 2:30 p.m. Oakland Center Crockery. Sponsored by the Student Board of the School of Business Administration. Fee. Call 370-2020.

ATHLETICS

October 7 — Volleyball, Northwood Institute, 7 p.m., Lepley Sports Center. Call 370-3190.

October 8 — Soccer, Ohio Wesleyan University, 3 p.m., Lepley Sports Center field. Call 370-3190.

October 15 — Soccer, Western Michigan University, 3 p.m., Lepley Sports Center field. Call 370-3190.

October 14, 16 — Volleyball, Wayne State University (7 p.m.) and Ferris State College (7:30 p.m.) on respective dates, Lepley Sports Center. Call 370-3190.

SPBFILMS

October 3-4 — *The Color Purple*, 7 and 9:30 p.m. Friday and 3 p.m. Saturday in 201 Dodge Hall. Admission.

October 8 — *The Meaning of Life*, 8 p.m. 201 Dodge Hall. Admission.

October 10-11 — *The White Nights*, 7 and 9:30 p.m. Friday and 3 p.m. Saturday in 201 Dodge Hall. Admission.

October 15 — *Nightmare on Elm Street*, 8 p.m. 201 Dodge Hall. Admission.

October 17-18 — *To Live and Die in L.A.*, 7 and 9:30 p.m. Friday and 3 p.m. Saturday in 201 Dodge Hall. Admission.

CINEMATHEQUE

October 11 — *The Hunger*, 7 p.m. 201 Dodge Hall. Admission.

NSF Accepts Fellowship Applications

Students selected for awards in the 1987-88 National Science Foundation fellowship competition for graduate students and minority graduate students will receive stipends of \$11,100 for 12 months. The cost-of-education allowance to the institution chosen by the fellow for graduate study will be \$6,000 in lieu of all tuition costs and assessed

fees.

NSF graduate fellowships are intended for students who are at or near the beginning of their graduate study, and will be awarded for study or work in science or engineering leading to master's or doctoral degrees in the mathematical, physical, biological, engineering and social science fields, and in the history and philosophy of science.

Students must apply for the fellowships by November 14. Further information is available from the Fellowship Office, National Research Council, 2101 Constitution Ave., Washington, D.C., 20418.

Apply Now for Mellon Fellowships

Seniors or recent graduates interested in the Mellon Fellowships in the Humanities have until October 31 to apply.

The renewable fellowships provide \$9,000 plus payment of tuition and standard graduate school fees. From 100-125 fellowships will be awarded.

Applicants must present evidence of outstanding academic promise and plan to begin graduate work in preparation for a career of teaching and scholarship in a humanistic field of study. Traditional humanities disciplines are considered, except for the creative and performing arts. Applicants must submit results of the Graduate Record Exam.

Students may nominate themselves or be nominated by faculty members. For complete details, call Brian Murphy, director of the Honors College, at 370-4450.

Reddy Speaks at U-M Dedication

Venkat N. Reddy, director of the Eye Research Institute, was the principal speaker at the dedication of the Michigan Eye Bank Research Center of the W.K. Kellogg Eye Center at the University of Michigan.

The new laboratories consist of 23,000 square feet devoted to scientific research in the cause and treatment of eye diseases. The laboratories were completed with a \$2 million contribution from the Michigan Eye Bank and the Lions Clubs of Michigan.

Reddy's address was *State of the Art in Eye Research*.

Reddy serves on the Research Review

Panel of the Michigan Eye Bank and Transplantation Center. The organization supports research in both blinding eye diseases and the basic science of sight and vision. The seed money is provided to researchers to develop new ideas and to obtain initial experimental data that can form a basis for larger governmental funding sources.

Since 1981 the Michigan Eye Bank has funded 36 meritorious research proposals from various universities and major hospitals in the state. Six were to OU faculty members.

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