Oakland University

OAKLAND UNIVERSITY News

104 North Foundation Hall
Rochester, MI 48309-4401

A publication for faculty and staff

August 1988

Increase in Place for Fall Tuition Rates; Fee Schedule Remains Unchanged

An 8.69 average increase in tuition and fees beginning with the fall semester has been approved.

A Michigan resident freshman carrying 31 credits a year will pay $2,107.50, an increase of $170.50 over the adjusted rates for spring and summer 1988.

Michigan freshmen and sophomores will pay $62 a credit hour, up $5.50 from the adjusted rate for spring and summer; resident juniors and seniors will pay $71 a credit hour, an increase of $6.25; and resident graduate students will pay $112 a credit hour, up $9.25 from spring and summer. Required fees are $185.50 a year for undergraduates and $165 for graduates, both unchanged from last fall.

The university earlier had adjusted its rates upward for the spring and summer semesters. Students will pay 19.3 percent more this fall in tuition and fees than they did a year ago.

'In light of the very lean appropriations bill emerging in Lansing to cover the cost of government, it is necessary for the public universities of the state to increase tuition to maintain financial integrity. Oakland has opted to raise tuition...to bring a projected fiscal year '89 budget into balance.'

— President Champagne

President Joseph E. Champagne said, "In light of the very lean appropriations bill emerging in Lansing to cover the cost of government, it is necessary for the public universities of the state to increase tuition to maintain financial integrity. Oakland has opted to raise tuition only by that amount necessary to bring a projected fiscal year '89 budget into balance. The option to eliminate programs is not realistic at this time, for the long-term cost of rebuilding such programs in the future would be excessive, given the fact that we do expect future state support to be greater than is possible this year. We deeply regret the necessity for a tuition increase, but feel it is necessary to ensure a high degree of quality and stability within the university and provide the type of programs needed by our students."

University trustees were sympathetic with students who will pay the higher tuition, but noted that they lacked alternatives in adopting the tuition rates July 25.

Board Chairperson David Handleman agreed with Champagne, saying cutbacks could damage the integrity and quality of OU.

Others offered similar remarks. "I recognize the justification for seeking an increase is state government hasn't come through in a fashion we would have liked," said Trustee Ken Morris, the lone dissenting vote on the tuition matter. Trustees Larry Chunovich and Stephan Sharf were absent.

Morris continued that he fears the ripple-effect caused by increasing tuition rates at OU and other institutions. As tuition rises, he said, additional students at the outer rings are cut off from the opportunity to attend college. Morris added that young school children may give up hope of ever attending a college when they hear about the costs of a college education.

Trustee Phyllis Law Googasian joined Morris in urging employees of state colleges and universities to mobilize and become leaders for increased state funding.

A DuBois Scholars program participant takes notes during a lecture.

DuBois Program Emphasizes Achieving Academic Goals

Two weeks of intensive academics — with some light diversions thrown in, too — ended for 50 Detroit and Pontiac middle school students on July 23.

The minority students were guests of OU for the W.E.B. DuBois Scholars Summer Institute. During their stay, they studied under university professors, lived in residence halls and generally enjoyed the campus atmosphere.

The program emphasized critical thinking for the students, who will be eighth graders this fall. Goals were to introduce students to college life, point out careers in which minorities are underrepresented, assist participants in identifying educational development needs and provide activities which will ensure the acquisition of academic attitudes and skills essential for a successful college experience.

This year's theme was *Rethinking and Remaking Our Worlds — The Worlds of Our Imagination and Reality.*

Courses were *African American History: From DuBois to King; Literature and the Theatrical Arts; Philosophy: Ethics, Logic and Morality;* and *Language Arts Workshop: Thinking and Writing Skills.*

Students also learned how to conquer math fears and studied classical music and personal development. Among the diversions for the students were a trip to Stratford, Ontario to see *Richard III,* a tour of Meadow Brook Hall, swimming and horseback riding.

Instructors were Jimmie Abbington, music; Jennifer Albertson, Kate Royce-Burdick and William Fish, philosophy; Wallis Anderson and Phyllis Duda, communication arts; Curtis Chipman, mathematics; Brian Murphy, literature and theatrical arts; Carrie Owens, attitudes, habits and skills; Dr. Patricia Rodgers, personal health; and Phillip Smith, history.

Murphy, director of the Honors College and professor of English, arranged the academic program. Manuel Pierson, assistant vice president, Office of University and School Relations, directed the institute. Funding was provided by the state-supported Martin Luther King, Jr./Cesar Chavez/Rosa Parks Program.

'Carousel' Highlights Annual Employee Picnic

The annual university faculty and staff picnic will precede a performance of *Carousel* at Meadow Brook Music Festival on September 9.

The picnic will begin at 6 p.m. on the festival grounds. The performance, beginning at 8 p.m., stars Patrice Munsel, Rex Smith and Stephanie Zimbalist in the Rodgers and Hammerstein musical.

President Joseph E. Champagne and his wife, Emilie, invite the university community to attend. Members of the Board of Trustees and the Alumni Association Board of Trustees have also been invited.

Reservations must be made by August 26. A complimentary parking ticket will be sent to your campus address. Picnic and concert tickets will be provided at the festival box office.

Reservation forms have been circulated and may be returned to the President's Faculty/Staff Picnic, 101 NFH. The picnic is supported by the Oakland University Foundation.

Howard Witt Assumes Reins of SECS

Professor Howard Witt has been named dean of the School of Engineering and Computer Science.

Witt assumed his new responsibilities following approval by the Board of Trustees on July 25.

Witt has been a member of the faculty since 1967. Most recently he has also served as interim dean since the resignation of Robert M. Desmond, who resigned to accept a position at Rochester Institute of Technology.

Provost Keith R. Kleckner called Witt a senior faculty member with solid academic credentials and extensive administrative experience. "He has served the university well in a variety of roles over the years, and we feel he will make a fine dean," Kleckner said.

Witt received his undergraduate degree from the University of Toronto, his master's from Princeton University and his doctorate from Cornell University.

The new dean has held teaching and administrative positions within the School of Engineering and Computer Science. In addition to professional publications, he has served as a consultant to Westinghouse Electric and other corporations. He is a senior member of the Institute of Electrical and Electronics Engineers, Tau Beta Pi, and the Engineering Society of Detroit.

Witt

Ten Receive Chairperson Appointments

Ten faculty members have been appointed to three-year terms as department chairpersons.

The actions were approved by the Board of Trustees July 25 to run through August 14, 1991.

Appointed were Paul Tomboulian, chemistry, ninth appointment; Glenn A. Jackson, computer science and engineering, first appointment; Robert T. Eberwein, English, third appointment; Peter J. Binkert, linguistics, first appointment; David P. Doane, management and information systems and quantitative methods, second appointment; Joseph Der Hovanesian, mechanical engineering, second appointment; Robert I. Facko, music, theatre and dance, first appointment; David C. Bricker, philosophy, first appointment; William A. Macauley, political science, first appointment; Jane Briggs-Bunting, rhetoric, communications and journalism, first appointment.

Sculpture to Grace South Foundation Lawn

An outdoor sculpture donated to the university will add to the campus environment.

Motherswell by Joseph Wesner was scheduled to be placed in front of South Foundation Hall the week of August 1.

According to the artist's statement, the sculpture addresses "the continuation and celebration of the values and history of the family unit and its central figure...expression of the idea of maternity....The image, forms, colors and gestures in the sculpture, circular shapes and their integration, are connected to the daily table top, as well as, to water itself, projecting a sense of nourishment of life and birth. *Motherswell* is a monument to the maternal role and its inescapable relevance and beauty."

The sculpture, of painted steel and weighing 1,200 pounds, is eight feet in diameter and seven feet, four inches high.

Meadow Brook Art Gallery Curator Kiichi Usui said that over the past few years, six offers for outdoor sculptures have been made. Four did not meet university artistic standards and the fifth lacked a financial sponsor.

Motherswell has been donated by Kempf Hogan of Birmingham, Dr. and Mrs. T. Jacob of Huntington Woods, Dr. and Mrs. Willis Stephens, Jr., of Bloomfield Hills and Mr. and Mrs. Eliot Bank of Birmingham. Hill Gallery in Birmingham is providing transportation and installation services. The university is providing the concrete footings.

Wesner is a Birmingham resident and a graduate of Georgetown University. He holds a master's degree from Cranbrook. The artist has been commissioned to create outdoor sculptures in California and Michigan.

Trustee Donald Bemis Resigns from Board

Upon assuming the office of Michigan superintendent of public instruction, Donald Bemis submitted his resignation as an OU trustee.

The resignation was effective July 1. Governor James J. Blanchard must now appoint a replacement. Bemis' term expires August 11, 1992.

The OU Board of Trustees praised Bemis at its July 25 meeting and named him trustee emeritus.

California Calls, Copenhaver Answers: It's Off to Life in Riverside

For some strange reason, Brian P. Copenhaver packed his bags for southern California, forsaking the ever-changeable weather of Michigan.

As he put it, he got tired of shoveling the climate.

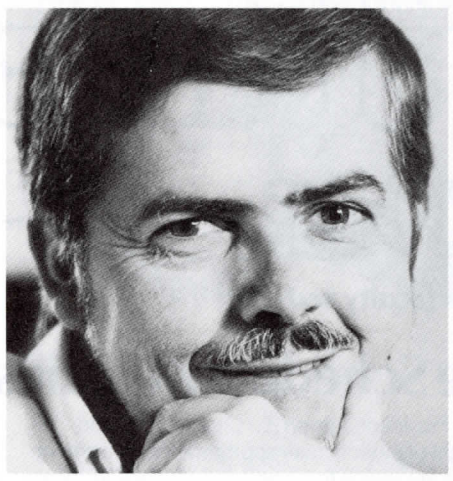
The former dean of the College of Arts and Sciences is off to the University of California at Riverside, if not for the change of scenery, then for the new career opportunities within its College of Humanities and Social Sciences.

"The University of California has some excellent academic opportunities for me that I wouldn't have elsewhere," Copenhaver said. "For example, the college I'll be in charge of has doctoral programs in all departments and administratively as a dean, that will be more interesting, more challenging. Then, eventually, if I stop being an administrator, I'm at the point in my career where my work is both broad and specialized enough as a historian that it'll be useful for me to have access to graduate students."

The Los Angeles area, with its world-class research libraries, provides a natural academic climate for Copenhaver. His specialty is the intellectual history of Europe, with particular interest in philosophy and science.

"In the same way that people are entertained by seeing a movie or watching television or going to a ball game, I'm entertained by learning, reading and writing about people who have been dead for a long time," Copenhaver said.

Issues facing Copenhaver at Riverside include growth. The campus, one of nine in the UC system, has about 6,000 students but the same size faculty and twice the budget of OU. "The high end of the master plan for UC-R talks about 27,000 students by the end of the first decade of the next century," he said.



Copenhaver

"That's a good kind of problem to have administratively. There are difficulties that come with shrinkage and a negative economy. There are difficulties with growth in a positive economy. As someone once said, 'I've been poor and I've been rich, and I like rich better.'"

At OU, Copenhaver served as dean during a period of important change. When he arrived in 1981, the university was in the midst of a self-study conducted by the Commission on Academic Mission and Priorities. During the following years, his college contracted in some areas and expanded in others to meet the changes dictated by enrollment trends and limited resources.

"In the longer term, I'd say the two fundamental problems that I faced were faculty morale, which needed to be reconstructed. I hope I succeeded in creating a climate of openness, trust between the administration of the college and the faculty of the college. To a great extent (Provost Keith) Kleckner has done the same thing at his level.

"Another leading problem, an exceedingly important one, was that Oakland didn't have a general education system when I came. I guess if there's one thing that I am proudest of at Oakland for having accomplished, it is that."

Copenhaver, firmly rooted in the humanities, does not share the fear of some colleagues who see technical education overtaking the classic university curriculum, but urges vigilance to ensure that it does not.

"I'd say that at Oakland University, if one looks at Oakland in the context of American public higher education, that the faculty historically have succeeded in keeping the humanities and the arts strong. You can tell that very, very quickly, for example, from looking at the results that Sheldon Appleton is getting from the North Central Accreditation study. You look at our faculty in the arts and social sciences and humanities with respect to things like publication or teaching results, and they look in terms of quality, just like our science faculty. In other words, they're damn fine people."

The next dean, Copenhaver said, must preserve and enhance the quality of academic life and be energetic about the cause of general education. "I'd say an arts and sciences dean who has done those two things has done 90 percent of the job."

"I can say very, very definitively that my reason for leaving Oakland isn't for any negative reason. My reason is that I came to do some particular jobs, and I think largely that I have finished them. Also, at this point in my career, there are some things in California that I find quite attractive."

Presumably, that includes weather that doesn't stick to a snow shovel.

— By Jay Jackson

Senior Presents Research in Czechoslovakia

Senior Susan Mosier can say she stood out in the crowd.

Mosier presented a research paper at a conference in Czechoslovakia and was perhaps the only undergraduate of 6,000 scientific delegates in attendance.

Researchers from 50 countries attended the 14th International Congress of Biochemistry in Prague in July. Mosier was presenting author of *Specific Progestin Binding in Clinical Isolates of Pseudomonas aeruginosa.* Graduate student coauthors were Cliff Hurd and Nancy Rosenthal.

"The work, which received a very warm reception, has reported for the first time the presence of progesterone binding proteins in bacteria," says Professor Virinder K. Moudgil, biological sciences, in whose laboratory Mosier carries out her work. "It has a tremendous biological and evolutionary significance. Pseudomonas is a pathogenic microorganism and is known to cause many urinary-tract infections. The steroid state of a woman may, therefore, influence her susceptibility to various infections."

Assistant Professor Satish Walia collaborates in the research.

Our People

Send brief items to the News Service, 104 NFH. Items are published as space allows.

PUBLICATIONS

•An article by Syed M. Mahmud, computer science and engineering, and Andrzej Rusek, electrical and systems engineering, appeared in the June issue of the *IEEE Transaction on Instrumentation and Measurement.* The article was *A Microprocessor-Based Switched-Battery Capacitance Meter.* The IEEE is the Institute of Electrical and Electronics Engineer, Inc.

•Anandi P. Sahu, business administration, is author (with Scott A. Monroe) of *Interregional Variations in Productivity Growth and the Structure of Production in the U.S. Food and Kindred Products Industry.* It appeared in the *American Statistical Association 1987 Proceedings,* business and economic statistics section.

•Osa Jackson, physical therapy, has completed a chapter on *Adapting Physical Therapy Intervention to the Elderly* for the new textbook to be released, *Manual of Physical Therapy,* edited by Otto D. Payton. Jackson's chapter is a detailed description of how to modify physical therapy intervention to achieve the most effective clinical outcomes. She says the premise of the chapter is "movement is life — without movement life is unthinkable," as was stated by Moshe Feldenkrais.

•Keith Stanovich, psychology, has been invited by the Institute for Scientific Information to prepare a commentary to be included in the *Citation Classics* section of *Current Contents.* His article, *Toward an Interactive Compensatory Model of Individual Differences in the Development of Reading Fluency,* published in 1980 in *Reading Research Quarterly,* has been identified as one of the most frequently cited works in its field by the Institute for Scientific Information.

•Bruce J. Mann, English, reviewed R.C. Reynold's *Stage Left: The Development of the American Social Drama in the Thirties* for the spring issue of *South Central Review.*

PRESENTATIONS

•Fatma Mili, computer science and engineering, was an invited panelist at the Boston conference, DSS88 on Decision Support Systems. Mili gave a presentation, *Issues in the Design of Active Decision Support Systems.*

•Marc Briod, human development and child studies, delivered a paper to the seventh International Conference on Human Science Research at the University of Seattle. The topic was *Childhood's Time: An Hermeneutical Study.*

•Students Carolyn Nine, Donna Bienewicz and Michele Tulak have received awards and made presentations while working in the lab of Fay Hansen-Smith, biological sciences. Nine received a student research summer fellowship from the American Heart Association of Michigan for her project, *Biochemical Analysis of Capillary Basement Membranes.* Bienewicz presented a poster of her undergraduate research project at the FASEB meetings in Las Vegas. Her project was *Influence of Dietary Galactose on the Expression of Terminal alpha-methyl Galactosyl Groups in Muscle Capillary Basal Laminae.* Coauthors were Hansen-Smith and Nalin Unakar. Tulak presented a poster at the International Association for Dental Research meeting in Montreal. The work, *Differentiation of Capillary Lectin Binding in Skeletal Muscles of 'Xenopus laevis,'* was carried out while she was on a fellowship from the National Institute for Dental Research. Coauthors were Hansen-Smith and D.S. Carlson. Hansen-Smith also presented a poster at the FASEB meeting on *Fluorescent Delineation of Microcirculatory Vessels in Thin Muscles and Mesentery.*

•Fred Hetzel, physics, spoke on *Biological Effects of Hyperthermia with Ionizing Radiation* at the 10th annual Bioelectromagnetics Society meeting in Stamford, Conn. Abraham R. Liboff, physics presented two talks, *Cyclotron Resonance in Ion Channel Proteins with 3-Fold Cylindrical Symmetry* and *Ion Cyclotron Resonance Study in Turtle Colon.* Liboff also presented a poster in collaboration with a group from the University of Texas Health Science Center, *Inhibition of Normal Fibroblast Cell Contraction by Exposure to Magnetic Fields.* Kenneth Jenrow, a graduate student in physics, presented a poster on *Spectral Analysis of Sleep EEG for Different Geomagnetic Orientations* with Liboff and Harold Zepelin, psychology. Jenrow received a $570 grant from the Bioelectromagnetics Society in connection with this presentation.

•Roberta C. Schwartz, journalism, spoke at the third international meeting of the Hemingway Society in Schruns, Austria. The seminar discussed the short story, *After the Storm.*

•Judith K. Brown, anthropology, spoke about Navajo religion to a class in comparative religion at Rochester High School. She also spoke at a luncheon meeting of the Utica Kiwanis Club about anthropology. During the next winter semester, Brown will be at the Center for Research on Women and Gender at Stanford University, continuing her cross-cultural study of wife-abuse.

•Kristine Salomon, library, presented a poster session, *CD-ROMs in Reference Departments: Acceptance or Rejection?,* at the American Library Association annual conference in New Orleans.

•John R. Stevenson, health sciences, coauthored, with John J. Karazim, M.D., and Joe H. Yun, M.D., of Crittenton Hospital, *Ventricular Tachycardia in a 17-year-old Cross Country Runner.* It was one of only six cardiovascular case presentations accepted at the annual meeting of the American College of Sports Medicine in Dallas. Stevenson was main author of *A Comparison of Land and Water Exercise Programs for Older Individuals.* Physical therapy graduates Susan Tacia, Jackie Thompson and Cathy Crane were secondary authors. Both abstracts have been published in the April supplement of *Medicine and Science in Sports & Exercise.*

Stevenson also coauthored, with exercise science student Wayne P. Hollander, *A Qualitative Analysis of the High Racquet Position Backhand Drive of an Elite Racquetball Player.* Hollander presented the paper at the sixth International Symposium on Biomechanics in Sports in Bozeman, Mont. Also presented at the symposium, with Stevenson as main author and secondary authors Chris G. Barnett and Keith L. Krings, was *Relationships Between Rotator Cuff Strength Paramaters and Throwing Velocity of College Baseball Players.* Both of the papers will be published in the official proceedings, *Biomechanics in Sports VI,* later this fall.

CONFERENCES

•Naim A. Kheir, electrical and systems engineering, participated in the annual meeting of the National Electrical Engineering Department Heads Association in Orlando.

•Robert Eberwein, English, chaired a panel, *Remakes: Theory and Praxis,* at the meeting of the Society for Cinema Studies held at Montana State University in Bozeman.

APPOINTMENTS

•Keith R. Kleckner, provost, has been elected to a two-year term as chair of the academic officers group of the Presidents Council of State Universities. He has also been elected to a third term as chairman of the Board of Governors of Cranbrook Institute of Science. He continues to serve as a trustee of Cranbrook Educational Community.

•Ronald E. Olson, health sciences, has accepted the position of contributing editor for the *Potential Patterns* section of the *Journal of Allied Health.*

The *Oakland University News* is published every other Friday during the fall and winter semesters and monthly from June-August. Editorial offices are at the News Service, 104 North Foundation Hall, Oakland University, Rochester, MI 48309-4401. The telephone is 370-3180. Copy deadline is noon Friday of the week preceding the publication date.

•James Llewellyn, senior editor and news director

•Jay Jackson, staff writer

•Rick Smith, photographer

In the News

Recent news coverage has included the following.

•The *Chicago Tribune* featured the visit by composer Virgil Thomson in its Sunday arts magazine on July 10. Writer Howard Reich had visited OU during Thomson's residency as a McGregor Professor in the Humanities and Arts.

Jobs

Information about position openings is available at the Employee Relations Department, 140 NFH, or by calling 370-3480.

•Accounting clerk III, C-7, Division of Continuing Education.

•Accounting clerk I, C-5, Meadow Brook Hall.

•Manager of labor studies programs, AP-9, Ken Morris Center for the Study of Labor and Work.

New Faces

Recent staff additions include the following persons.

•Loan Dang of Sterling Heights, an electron microscopy technician in the Department of Biological Sciences.

•Mark Gordon of Clarkston, a public safety officer in the Department of Public Safety.

•David Moroz of Mt. Clemens, project coordinator in the Office of Special Programs.

Bits & Pieces

See Your Way Clear

New procedures are in effect for participants of the Co/op Optical plan.

Participants no longer need to obtain a certificate from the Staff Benefits Office to make an appointment at any of the 11 Co/op Optical offices. When you or your dependent call for an appointment, give the social security number of the university employee for verification.

If you have questions about your coverage, call Co/op Optical at 366-5104. To add or delete a dependent from your contract, visit the Staff Benefits Office in 142 NFH or call 370-3483.

Gallery Benefactor Dies

Professor Harry Bober of the Institute of Fine Art at New York University, a longtime friend of Meadow Brook Art Gallery, died in June.

Kiichi Usui, curator, said Dr. Bober had been "a great friend and supporter of the Meadow Brook Art Gallery through his continued gifts of art works to the university art collection."

Dr. Bober was one of the guest speakers at the first Symposium on the Arts in 1962 at OU. "Since then, he had kept in close contact with a warm and sympathetic eye watching the development of this young institution," Usui said. "When he learned of the death of John Galloway, former chairman of the Department of Art, he presented the university with a fine New Guinean Sepik River bark painting in his memory."

Dr. Bober donated an additional 23 art objects in the field of primitive art to OU. Selected Oceanic art works from his collection were exhibited at the Meadow Brook Art Gallery in 1980.

In 1979, OU awarded Dr. Bober an honorary Doctor of Humanities degree.

Can't Get There from Here

Delays on area roads due to construction will continue this month.

Projects now under way that affect university commuters include the following:

- The ramp from northbound I-75 to westbound Square Lake Road in Auburn Hills has intermittent lane closures, with one lane always open.
- I-75 from Square Lake Road to Joslyn Road in Auburn Hills has two lanes of traffic both ways, but the lanes are 11 feet instead of 12 feet.
- I-75 traffic will use the right and shoulder lanes both ways from M-15 to Joslyn Road in Pontiac. Two lanes will be open during daytime.
- M-24 (Lapeer Road) under the I-75 bridge in Auburn Hills has intermittent lane closures from 7 a.m.-2 p.m. northbound and from 9 a.m.-4 p.m. southbound on weekdays.
- M-24 from I-75 to Harmon Road in Auburn Hills has intermittent one-lane closures northbound and southbound.
- East and west M-59 in Auburn Hills has intermittent single-lane closures under I-75 from 9 a.m.-2 p.m. weekdays.

Other than that, things are fine.

The Number to Call is...

Alan F. Miller, assistant vice president for Campus Facilities and Operations, reminds everyone that emergency repairs may be requested by calling 999.

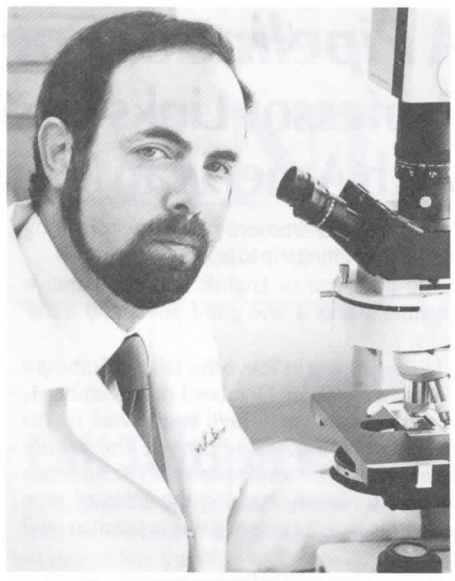
The 999 number is available 24 hours. Emergencies involving electrical, plumbing, structural, mechanical and elevator problems may be reported.

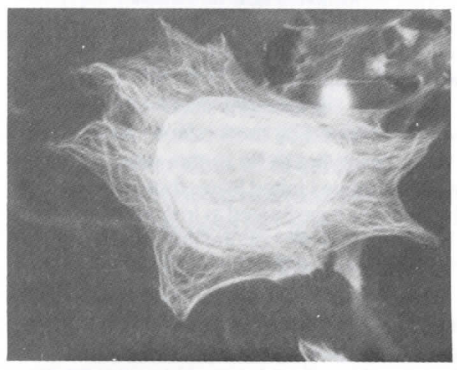
For routine service calls, continue to dial these numbers: electrical, mechanical and structural maintenance, and the key shop, 370-2381; grounds maintenance, 370-2413 or 370-2166; and custodial services, 370-2168 or 370-2166.

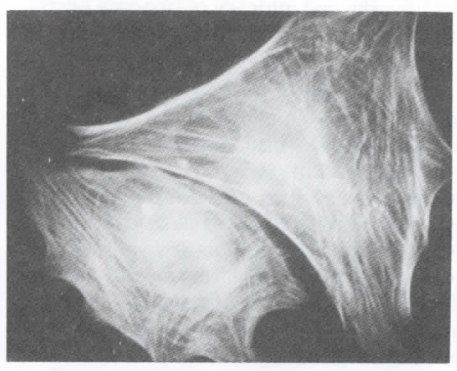
We Gave a Bit More

The American Association of Fund-Raising Counsel has corrected a figure it released about charitable giving in the United States.

The association says it should have reported that Americans gave $10.84 billion to education in 1987, rather than $10.55 billion. The figure was reported in the July issue of the *Oakland University News*.







Biologist Sheldon Gordon shows a cultured corneal endothelial cell treated with antibodies to reveal the microtubule pattern (middle). At bottom, the microfilament distribution appears.

Investigation of Cell Movement Has Broad Implications for Humans

Mechanisms that allow cells to migrate during wound repair or throughout the body are one of the latest targets of investigation for cell physiologists like Sheldon Gordon.

Gordon, an assistant professor of biological sciences, looks at the process of cell migration. He studies how cells spread and interact to repair a wound in the corneal endothelium, a single layer of tissue on the posterior surface of the cornea of the eye, that is responsible for maintaining the transparency of the cornea.

This ability to migrate is known but not fully understood and has implications far beyond his work, Gordon says. In fact, he says interest in his work comes not only from the National Eye Institute which supports his research, but from other researchers studying cancer and developmental biology.

The researcher explains that cell movement is essential for normal embryonic development, or it can mean death for a patient whose cancer has metastasized throughout the body.

"How do cells move, what mechanisms are involved? This is really where investigations on cell motility are directed," Gordon says, "not just wound repair of normal cells, but also, the migratory movements and associated mechanisms in embryonic and cancer cells."

A basic researcher, Gordon looks at his particular puzzle, how endothelial cells move. If we can answer that question, he says, "then we can unlock many secrets of cell movement in general."

Gordon says human endothelial cells divide very poorly, unlike cells in some other organs, but they do migrate to help repair a wound. If some portion of an adult endothelium is damaged, for example, the cells simply die, and the remaining undamaged cells spread out to handle their functions. However, if the injury is extensive, vision may not be restored, and a corneal transplant may be necessary.

The investigator is looking at how these cells move across and interact with their underlying substrate to spread out and repair a wound. He has had success in learning how to inhibit the movement of these cells and modify their limited ability to divide. Cell migration is a complex series of interactions involving many aspects of the cell including its cytoskeleton, the protein fibers that compose the cell's structural framework, the cell membrane and the external environment around these cells.

"It is really interesting to watch cells under a microscope as they move, or to look at a preparation of tissue that has been processed during wound repair," Gordon says. "One can see what is occurring in general but at the same time not know subcellularly what is going on."

Professor Gordon is interested in cell structure. He uses electron microscopy to understand the substructure of cells and fluorescence microscopy to localize specific proteins with antibodies directed against various cellular components. His research has been conducted on corneas taken from the rabbit and rat, depending on whether the goal is a tissue or organ culture experiment.

The scientist does mostly organ culture in which the cornea is excised from the eye and put in a nutrient media in which the researchers can then manipulate the system to see how it reacts to the presence or absence of certain drugs.

Gordon says of migration, "It is a problem that deals with knowing what's going on inside the cytoplasm and what's going on outside the cell, because it is a process that involves components on both sides of the cell membrane. I think that is one of the reasons it's such a complex situation. It is not contained within the cell, it is the cell communicating with its outside environment and reacting to its outside environment."

The key, he says, will be the ability to bring knowledge of these different elements together.

He is hopeful that some very important answers to the mechanism of cell movement will be coming from his lab in the next few years.

In addition to his position in the Department of Biological Sciences, he is an adjunct assistant professor in the Eye Research Institute and holds an associate research position at the Kresge Eye Institute of Wayne State University School of Medicine.

— By Jim Llewellyn

Hope for Hearts: Regeneration of Cardiac Muscle Nears

The ability to regenerate injured cardiac muscle cells may be just heart beats away from reality.

Scientists from this country, Russia, West Germany and Romania gathered at Rockefeller University in June to share information at the first International Cardiac Regeneration Symposium.

Dr. Alexander Mauro of Rockefeller University organized the symposium. He won fame for his investigation of satellite or "extra" cells in skeletal muscle that assist in regeneration of those muscle cells. The hope that a similar situation could be induced in unused cardiac cells is one avenue of study. Researchers hope that these unused cells may be cardiac "stem" cells that may assume the function for cardiac regeneration.

Asish C. Nag, biological sciences, concentrated his studies on isolated single adult (rat) cardiac muscle cells established in culture. He was the first researcher to accomplish this feat, and his model system is now being used by researchers in this country and abroad.

Nag and other scientists feel that whatever is found in the rat system will be very similar to what will be found in humans.

"I have discovered that the heart possesses an age-dependent potential for regeneration after injury," Nag says. "The highest potential is present in the neonatal hearts; and as the animal undergoes maturity, the regenerative capacity of the heart disappears."

The researcher explains that heart cells die after coronary insufficiency or other blood circulation problems. These dead cells are replaced with scar tissue consisting mainly of noncontractile fibrous tissue which is incapable in helping in the generation of a heart beat. Nag says "the cells that would repopulate this injured area need both the ability to undergo cell division and have the ability to synthesize specific proteins that give the heart muscle its contractile ability."

Nag's research centers on cell multiplication and on the production of contractile proteins. He says he has been successful in getting the nucleus of the cell to divide into "two sister nuclei," and he has found that the necessary contractile protein is intact. "But right now we are facing a great obstacle," Nag admits, and that is getting the cytoplasm of the cell to divide as well. "We are working on this now, and hopefully, we will get it soon. If it happens, it will be an enormous help to mankind."

'I have discovered that the heart possesses an age-dependent potential for regeneration after injury.'

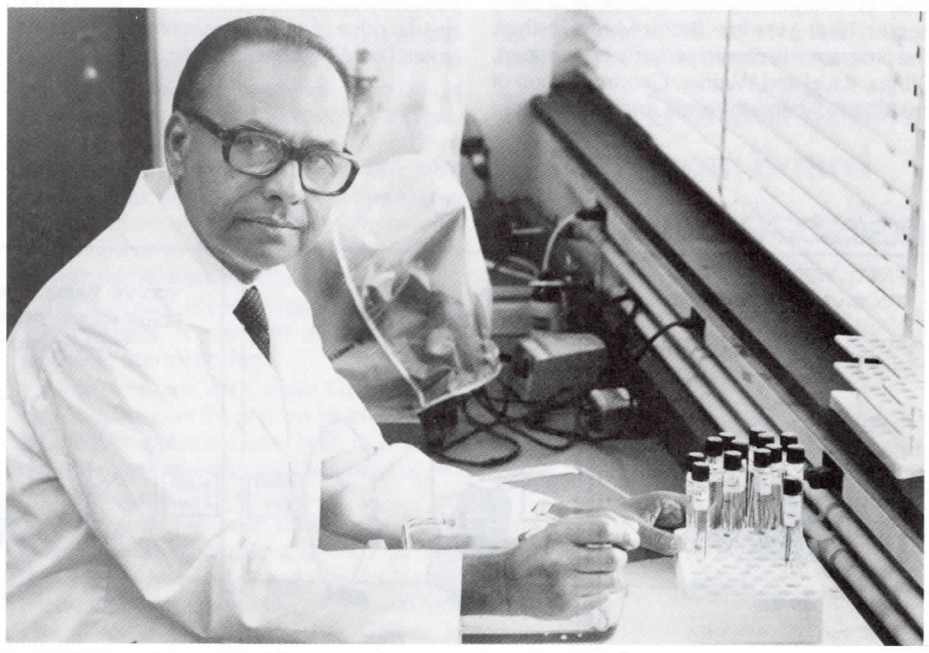
— Asish Nag

The OU scientist says cardiac muscle regeneration should continue to be approached on several fronts. It has been discovered that there are cells that are not performing a known function in the heart. Researchers should continue to see if these cells can be made to assume the same functions as the working cardiac muscle cell. "Some scientists feel that these cells can be induced to take over and perform the duties of injured heart cells as they do in skeletal muscle." Nag cautions "as early as 1977, we pointed out in publications that thus far we were unable to make these unused cells in the heart behave as 'stem' cells to perform the same functions as the injured cardiac muscle cells." He says "the other researchers at the symposium talked with me about whether some of the cells that are sitting in the heart and not doing anything could be induced to take over cardiac muscle duties through an injection of genes, and I feel this someday could be possible."

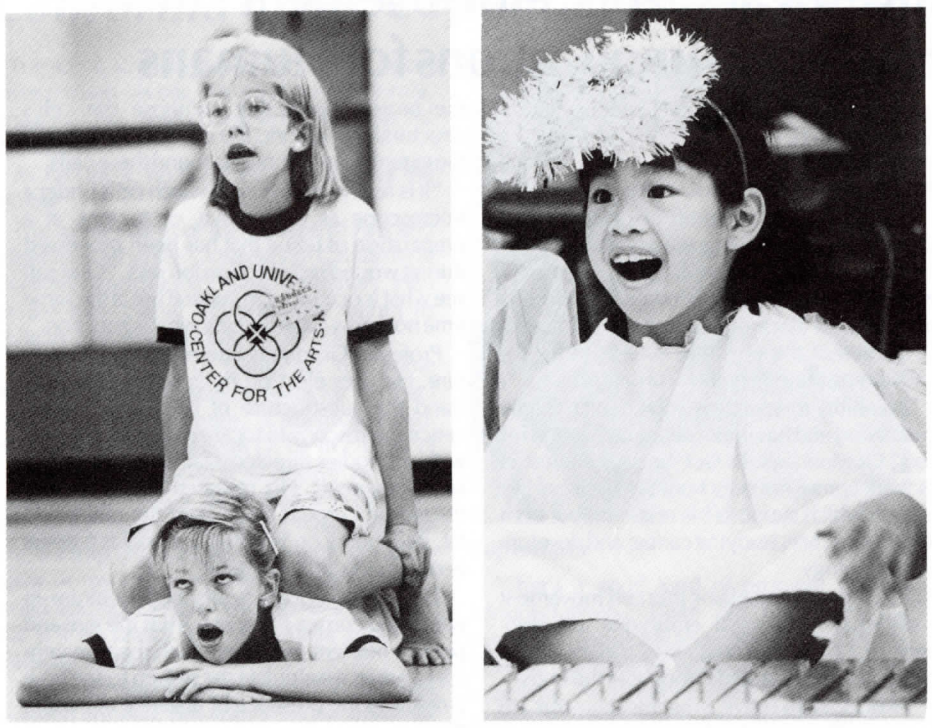
Nag says that it is also important to continue research on the isolated cell and to try to induce cytokinesis (the division of the cytoplasm into two parts that occurs in the latter stages of mitosis or cell division). If Nag or others succeed, these cells could some day be implanted to regenerate injured heart muscle.

Nag has also shared his research with the National Heart, Lung and Blood Institute of the National Institutes of Health last fall at an international symposium on the Biology of Isolated Cardiac Myocytes. His work and that of other scientists at the conference was published in 1988 under sponsorship of the institute.

— By Jim Llewellyn



Studies by Asish Nag could uncover the secret of cardiac muscle regeneration.



Camps conducted by the Center for the Arts brought out the hidden talents of young dancers, musicians and thespians. The popular camps filled quickly again this year with children anxious to learn the ropes from university instructors. Sometimes, it seems, the goings-on surprised even the participants.

Employee Award Goes to Franklin

Paul Franklin, coordinator, campus programs, received the Employee Recognition Award for July.

The award cited Franklin for his above and beyond contribution to the needs of Oakland University students. The selection committee based it decision on the following testimonials:

Franklin

•"I have contacted Paul many times to brainstorm programming and to problem solve. Always willing to be a resource person, he has proved to be consistently policy-oriented, practical and creative."

•"In the seven years I have known Mr. Franklin, I have never once heard him say a negative thing about Oakland University, the administration or his co-workers. I think that is a rare and amazing trait. His positive attitude and sincerity engenders positive morale and trust among the people he works with."

•"Paul offers students many opportunities for personal growth. He encourages them to test their self-limitations, to do more than they thought they were capable of doing. He teaches such skills as systematic creative brainstorming and realistic action plan development. Students have shared with me that he has offered them a caring and listening ear in times of personal need."

•"Paul is driven to do his best and to create programs that are a valuable contribution to our Oakland University community. He leaves his mark of professionalism and excellence on every campus program with which he is involved."

•"Even under duress, (Paul) works beyond expectations. He is known for putting in work hours well beyond what is expected for long stretches of time to get the job done right."

Employee Recognition Award nomination forms are available in all departments, from CIPO and at the Employee Relations Department. For more information, contact Larry Sanders at 370-3476.

Sound of Music Wafts Across Campus

A rigorous schedule of classes, rehearsals and performances is keeping the first Meadow Brook Academy Orchestra occupied during its two-week residency on campus.

Twenty-eight young but accomplished musicians are in training with eight members of the Detroit Symphony Orchestra until August 14. The academy orchestra will also perform with the visiting Congress of Strings and selected members of the DSO.

Academy orchestra members, chosen through audition, come from Michigan, Wisconsin and Missouri. The 60-member Congress of Strings is composed of musicians from throughout the United States and Canada. The American Federation of Musicians sponsors the COS, which visits the area as guest of OU and Wayne State University.

Three public concerts are slated for the Meadow Brook Academy Orchestra and Congress of Strings. The first will be at 8 p.m. August 10 at Meadow Brook Music Festival. The program will consist of music by Schubert, Glinka, Ravel and Wagner. Geoffrey Simon of the Albany Symphony and Gunther Herbig of the DSO will conduct. The program will be repeated at 8 p.m. August 13 at WSU.

At 5 p.m. August 14, the young musicians will perform at the Meadow Brook Music Festival in a joint concert with members of the DSO. Works by Strauss, Tchaikovsky and Brahms are on the program. Simon and Herbig will conduct.

The daily schedule for the academy orchestra consists of two rehearsals, plus master classes with members of the DSO, demonstrations and other events.

Academy orchestra sponsors are the Center for the Arts, the Meadow Brook Music Festival and the Academy for the Gifted and Talented of Michigan. The OU College of Arts and Sciences also provides support.

Tickets for the August 10 concert are $5 and may be obtained by calling the Meadow Brook Music Festival box office at 370-2010. Admission to the August 14 concert is included in the regular price of a Detroit Symphony Orchestra ticket. The WSU concert is free.

A Pipeline of Poetry
Professor Links Japanese Culture with American Market

Thomas Fitzsimmons is busy planning another recruiting trip to Japan.

The professor of English and comparative literature wants a few good poets and translators.

Upon arriving in Tokyo this fall as a Fulbright researcher — about October 1 or November 1, he's not certain yet — he'll begin work on his latest book in the *Asian Poetry in Translation: Japan* series. The series has kept Fitzsimmons occupied, already bearing the titles of nine books. He is, as he puts it, going to Japan to refill the pipeline.

Fitzsimmons will also serve as visiting poet and scholar in the new faculty of comparative culture at Sophia University in Tokyo. He will be the first visiting scholar of the new faculty.

As editor, Fitzsimmons selects poets whose work is admired by the Japanese themselves. "What I'm trying to do in this series is make available in the United States those poems that the Japanese have judged as important to them. Therefore, they are cultural information for us. That's what makes the series unique."

The success of the venture depends in part on how Fitzsimmons fares in finding a translator. A good translator must be able to capture the intensity and intricacy of Japanese poetry, which is an art form with a history spanning 13 centuries.

"The great problem with translating poetry is to end up with poems, unlike to translate information, where all you have to do is find equivalent information. You can't do that with poetry. You have to create an entirely new symbolic form to have the same effect as the old one. You can't do that just by matching words. You have to protect the rhythms, protect the sound effects and sometimes very different imagery, because images don't work the same in different cultures. What I have tried to do is find a translator who is also a poet in English, or to bring together people from both languages who I oversee their final work in terms of does it succeed as poetry in English, or is it just a paraphrase?"

Fitzsimmons elaborates that choosing a translator is itself an intense experience. "It's a process of feeling out information about personal relations. Everything in Japan that matters has to be done in terms of some kind of personal relationship. That's why American businessmen tend to have a very bad time over there," he says.

Japanese poetry has two popular modern forms: haiku and Tanka. Haiku is noted for its brevity, which requires suggestion rather than statement. "The haiku lover is also a lover of silence," wrote poet Ooka Makoto in the introduction of the seventh book in the series, *A Play of Mirrors: Eight Major Poets of Modern Japan*.

Tanka, however, is more spacious and allows the writer to state or develop emotions, Ooka wrote.

Although the forms of poetry are distinctive, Fitzsimmons says it is difficult to categorize content of Japanese poems. The Japanese understand the subtleties of poems, but it's not that Americans prefer the literal to the esoteric.

"Americans are more confused," Fitzsimmons explains. "They think poetry is some kind of fancy way to make statements and send messages, and communicate values and teach things, but it isn't at all. Poetry is a way of exploring both the possibilities of the language and the possibilities of the human imagination. If you come to it trying to read a lesson, then you can't stand the lack of clarity. The Japanese have no confusion about this. They've had an uninterrupted poetic tradition for a couple of thousand years, all in one language. The only big shift has been from traditional forms to modern forms, which are able to bring in far more kinds of subjects."

The Japanese know a poem is not a way to say something, but a way to suggest and explore, and to think.

"In America, poetry is something that is seen by most people as odd, even if they prize it, because it's not a part of their everyday life. The Japanese don't consider poetry as odd. They may not all be into it, but they don't find it strange that somebody writes poetry."

The professor sees each book through from editing to publishing. Support for the series comes from the National Endowment for the Arts, the Japan-U.S. Friendship Commission, OU and UNESCO. The project has become a family affair, with his wife designing the books and preparing the cover art. The University of Hawaii Press distributes the books, which have found a niche in libraries and at universities with Asian studies programs.

The biggest job of the series was editing an anthology of eight older poets, Fitzsimmons says. That may seem easy once he's finished with his latest project, an anthology of 15 younger poets.

Not one to call it a day, Fitzsimmons foresees at least three more books.

— By Jay Jackson

The Smothers Brothers

Events

CULTURAL

Pop concerts at Meadow Brook Music Festival — Kenny G., August 6; Smokey Robinson and Natalie Cole, August 9; Bobby Vinton, August 12; Ray Charles and the Smothers Brothers, August 13; Jean Luc-Ponty, August 15; Gordon Lightfoot, August 17; Salute to the Big Bands, August 19; Peter, Paul & Mary, August 20; Meadow Brook Festival Orchestra and laser light spectacular, August 26-27; Johnny Rivers, Bobby Vee, Del Shannon and Lou Christie, August 28; and the musical *Carousel*, September 6-11. Call 370-2010 for late additions or deletions.

Classical concerts at Meadow Brook Music Festival — Call 370-2010 for schedule of Detroit Symphony Orchestra and guest performers.

August 6 — *Picnic on the Grass XVI*, 6:30 p.m., Shotwell-Gustafson Pavilion. Sale benefits Meadow Brook Art Gallery. Admission. Call 370-3005.

August 7 — Concours d'Elegance, 10 a.m.-4 p.m. Admission. Call 370-3140.

August 20-21 — Art at Meadow Brook show and sale. Free. Call 370-3140.

ETCETERA

August 10 — OU Board of Trustees, 5 p.m., Oakland Center Gold Rooms.

August 16 — Academic Edge (Toastmasters), noon-1:30 p.m., 126-127 Oakland Center.

September 6 — Academic Edge (Toastmasters), noon-1:30 p.m., 126-127 Oakland Center.

TOURS

The Summer Tea Room at Meadow Brook Hall is open until the end of August. Hours are 11:30 a.m.-3 p.m. Monday-Friday. Guided tours are from 10 a.m.-3:45 p.m. Monday-Saturday. Tours (without guides) are from 1-3:45 p.m. Sunday. No reservations are needed. Call 370-3140.

COURSES

Meadow Brook Health Enhancement Institute offers an exercise-education program for adults with insulin- and noninsulin-dependent diabetes. The program focuses on strategies for life enhancement. Interested persons will learn about exercise, nutrition and self-care measures, and may participate in three medically supervised exercise sessions per week. Call Terri Darrenkamp, RN, at 370-3198.

CONFERENCES

Information below has been prepared by the Oakland Center Conferences office.

August 7-12 — Isiah Thomas Basketball Camp.

August 13 — Battle of the Corporate Stars at Lepley Sports Center.