Financial Aids Office Helps 35 Per Cent Of Undergraduates

Approximately 35 per cent of the undergraduate students at Washington University will receive nearly $3 million in financial aid from the University during the 1974-75 academic year.

Benjamin Sandler, director of the Financial Aids Office, said that it is rare for students to receive all their aid in one form. “Most of our financial aid is awarded in packages—combinations of different kinds of financial support, which may include scholarships, grants, loans and part-time campus employment. The average scholarship award is about $2000; the average loan is about $800.”

Ironically, Mr. Sandler said that “one of our biggest frustrations in working with high school students and their parents is persuading them to apply for financial aid. There is financial aid available, realistic in type and amount, and it is awarded not only to students from low-income families, but to many students whose families could fairly be called middle class. If a student is interested in the kind of education he can get at Washington University, is academically qualified, but doesn’t feel he can afford the cost, he is doing himself a disservice if he does not apply for financial aid.”

Mr. Sandler explained that aid is given in various forms in an attempt to spread scholarship dollars among as many students as possible. “The University is unable to meet the needs of all its students with scholarships and grants alone, so it supplements this support with loans and jobs. Beyond the necessity of supplementing scholarship support, the University believes in the concept of self-help, which suggests that students themselves, as well as their parents, ought to have a financial stake in their education.”

Mr. Sandler said that in general the office follows guidelines suggested by the College Scholarship Service to determine financial need. “If a family has an income beyond what is necessary to maintain a moderate standard of living, it is doing itself a disservice to not apply for financial aid.”

NASA Names WU Prof to Mars Team

Raymond E. Arvidson, assistant professor of earth sciences, has an interest in geology which is out of this world. Unlike most classically trained sedimentologists, this 26-year-old scientist focuses much of his attention and training on the world of space science.

Arvidson came by his knowledge deliberately. In 1969, he chose to study for his Ph.D. at Brown University under the guidance of T. A. Mutch, who was involved with planning missions to Mars.

Thanks to this association, Professor Arvidson learned how to interpret Martian photographs sent back to earth by Mariner satellites, and in time became one of about 100 “hybrids” in this country who can talk intelligently and confidently about the geological past of both the moon and Mars.

Because of his expertise, NASA has selected Professor Arvidson as one of twenty flight operations members of the Viking Lander Imaging Team involved in soft-landing two unmanned spacecraft on Mars in 1976. The Vikings will take off on their 440-million-mile trip between

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Financial Aids

(Continued from page 1)

we anticipate that a portion of that income will be contributed to the student's educational costs (25-55 per cent). We call this discretionary income. The difference between the actual cost of attending Washington University, $3400 ($3100 tuition; $1550 room and board; $750 incidentals), and the amount the family is able to contribute, constitutes the student's financial need."

Eligibility for aid is generally determined by academic quality and financial need, though 15 honorary scholarships were awarded this year to freshmen on a competitive basis.

The breakdown on types and amounts of aid given by the University to undergraduates and the number of students receiving assistance is:

1) 1300 WU scholarships totaling about $2,100,000.
2) 1100 National Direct Student Loans (awarded by WU from funds provided by the federal government) totaling about $872,000.
3) 60 campus jobs totaling about $36,000. These awards are renewable, and the amount given each year may fluctuate according to changing family need.

In addition to aid provided directly by the University, many students receive outside help. One hundred and seven students receive Basic Educational Opportunity Grants (provided by the federal government to full-time students with very high financial need) totaling $36,000; and 442 students receive Missouri Student Grants (provided by the state to Missouri residents with financial need who attend accredited Missouri colleges and universities) totaling $391,000. These outside grants and scholarships are incorporated into the student's award so that it will meet his financial need.

Mr. Sandler said that the Financial Aids Office also provides NSDLS to approximately 320 graduate students, but that many others receive loans and grants through their departments and divisions. Some financial aid is also awarded to University College students.

Mandelker to Speak Oct. 30

It was incorrectly reported in the Thursday, Sept. 26 W.U. Record that installation ceremonies for Daniel R. Mandelker, first Howard A. Stamper Professor of Law, would be held at 11 a.m. Monday, Sept. 30. The ceremonies will be held at 11 a.m. Wednesday, Oct. 30. Professor Mandelker will discuss "The Urban Crisis: New Issues for the Seventies," at the installation.

Environmental Protection Agency Installs Air Pollution Monitoring Tower at WU

By King McElroy

The EPA will hold an open house from 11 a.m.-4 p.m. Wednesday, Oct. 23, to explain the operation of this air pollution tower on Francis Field.

An air pollution monitoring system has been installed at the edge of Francis Field as part of an area-wide experiment by the Environmental Protection Agency. The 100-foot tower is one of 25 fixed stations which collect data for the area air pollution study. It will be at its present location until at least 1977.

The long-range goal of the study is to design a feasible economic plan to control air pollution in the St. Louis area. It is hoped that the information gained in this study will be used in other cities.

William H. Best, director of the Regional Air Pollution Study program, told scientists planning the study that he expected little inconvenience to the public, although he did say helicopters might hover as low as 200 feet over the ground to collect data and that mobile vans might cause some traffic tie-ups.

St. Louis was chosen for the study for a variety of geographical and climatic reasons. He said the city was outstanding in its fight against air pollution, dating back 81 years to the enactment of the first antismoke ordinance, long before the notorious blackouts of the 1930s when the word smog was coined. Former St. Louis Mayor Raymond R. Tucker was the leader in the fight against smoke in the 1930s. A Washington University graduate and professor of engineering, he became the city's smoke commissioner and later was elected mayor. He served in that capacity for four terms and then returned to the University as professor of urban affairs. He was an air pollution consultant until his death in 1970.

Mr. Best emphasized that RAPS is limited to gathering facts and has no part in enforcing measures to combat conditions brought to light. "There may be surprises for all of us," he said. "Some of the things popularly regarded as major offenders may turn out to be not so bad after all, while others now thought to be minor may prove to be the real devils."

What is measured? Actual amounts of air pollutants, both particulate and gaseous. Also, scientists collect readings of temperature, wind, radiation, air pressure and other meteorological factors that determine the movement patterns of pollution in the atmosphere.

The RAPS program costs $25 million. It is designed and operated for the EPA by Rockwell International Corporation's Science Center.

The first of 25 remote air-monitoring stations went into operation at Missouri Botanical Garden on April 16. All stations are in a 25-mile radius of the Gateway Arch and each has its own computer which feeds data into a master computer at project headquarters in Creve Coeur.

Survival Tips Outlined in New MSW-JD Student Handbook

Speaking Plainly is the title of a recently published book on Harry Truman, but it could just as easily have served as the name of a new 25-page guide on the joint social work-law program at the University, the only one of its kind in the U.S.A. This pint-sized, mimeographed "unofficial" handbook was developed by ten students enrolled in the program which leads to two degrees, a Juris Doctor (J.D.) and a Master of Social Work (M.S.W.).

Under "How to Survive in the Joint Degree Program," the authors urge students "to be assertive." Rule B counsels: "If you are persistent enough, you will be admitted to the course which has already been closed, and you will be allowed to have a practicum placement which no one has ever tried before. Do not settle for established curriculum."

In another "How to Survive" section intended for those in their first year of law school, the authors warn: "Remember the Socratic Method is inherently intimidating. If you ask a question in class, be prepared to answer it yourself."

Copies are available from Assistant Dean William Butterfield's office, Brown 210, ext. 4266.
Coin, Bike Thefts Raise Campus Thefts Crime

A 15 per cent increase in crime on the campus during the first six months of 1974 is due mostly to bike thefts and break-ins of coin vending machines, Chief Norman O. Schneider said.

This increase follows the national trend and is a reversal of what had been a steady decline since 1969 when crime was at an all-time high.

"In most cases," Chief Schneider said, "non-students are responsible for crime committed on our campus. Prevention of bike-thefting and theft of money from vending machines is extremely difficult since the thief can usually pass for a student. When equipped with a good pair of bolt cutters, a thief can take apart all but the most elaborate locks in minutes. Since there is no central registration system for bikes as there is for automobiles, there is little chance for recovering a stolen bike."

Chief Schneider's force of 19 deputized officers has substantially reduced car thefts on campus. Thefts once averaged as high as 12 or 15 a month, he said, and now auto thefts occur only once or twice a month.

"The main reason for the reduction in auto thefts is that we patrol the parking lots more frequently," he said. "And at times we have stationed some officers on the roofs of various buildings and have given them binoculars to check on suspicious activity."

"We're doing a very good job as far as crimes against persons are concerned," he said. "That includes assault, forcible rape and robbery." He pointed out that there have been no reported rapes on campus this year and none was reported last year.

He emphasized that security and crime prevention on the campus can be made easier if students will take a few common sense steps that can often thwart a potential attacker or a thief. Said he:

"Lock your doors, even if you're out of the dorm room for just a few minutes. Men and women both should use a buddy system when walking late at night. If you've got to go somewhere late at night take someone with you."

The WU Record is published weekly during the academic year by the Office of Information, director, Roger Signor; editor, Kathy Pearson; contributing editors, Dorothy Brockhoff, King McElroy; calendar editor, Judy Thomasson. Photographs by Herb Weitman, Rick Levine and Gail Cisna. Address all communications to the editor, Box 1142.

The Sydney M. Shoenberg Pavilion

Announcements

Two WU Business School Graduates have won awards in the 1974 American Marketing Association doctoral dissertation competition. They are: Michael R. Taylor, first place, for his dissertation, "Consumer Expectations, Decision Commitment, Product Information Value: Effects on Consumer Product Satisfaction"; and Donald J. Messmer, honorable mention, for his dissertation, "Belief Discrepancy and Repetition as Determinates of the Affective Response to Television Advertising." Taylor's advisor was C. William Emory, professor of marketing, and Messmer's advisor was Francis J. Connelly, associate professor of marketing.

Doctoral candidates from 27 graduate schools submitted 47 abstracts.

Compton Lecture October 9

Thomas S. Kuhn, Taylor Pine Professor in the History of Science at Princeton University, will give the Arthur Holly Compton Memorial Lecture at 11 a.m. Wednesday, Oct. 9 in Graham Chapel. Professor Kuhn will discuss "Puzzles vs. Problems in Scientific Development." He is best known for his two books, The Copernican Revolution and The Structure of Scientific Revolutions, which have been a major influence in the field of the philosophy of science. Professor Kuhn will also address a joint physics and philosophy colloquium at 4 p.m. Wednesday, on "The Crisis of the Old Quantum Theory, 1922-25," in Erow Hall, Room 201.

Joe F. Evans, associate vice chancellor for administrative services, presided at meetings last week in Kansas City of the Committee of Ten of the Missouri Coordinating Board of Higher Education. Mr. Evans, who was appointed chairman of the group last summer, said the committee is charged with devising a statistical method for obtaining compatible financial data from all state campuses of higher learning and to draw up a formula budgeting system for state schools. Preliminary reports on both subjects were reviewed at the meetings.

Recognitions

Sandra J. Holmes, a WU junior who is majoring in psychology, has been awarded a $1000 Clairol Scholarship. WU is one of 50 U.S. colleges and universities chosen to receive the scholarship on the basis of significant undergraduate programs specifically designed to encourage women over 35 to continue degree programs interrupted by marriage, child-rearing, and other responsibilities. A part-time student, Ms. Holmes works as a research assistant in the Mallinckrodt Department of Pediatrics. Metz to Direct Oscar Wilde Play Oct. 11-13

Oscar Wilde's "The Importance of Being Earnest," subtitled "A Trivial Comedy for Serious People," the first production of the Performing Arts Area (PAA) 1974-1975 season, will be presented at 8 p.m. Friday and Saturday, Oct. 11 and 12, and at 2:30 p.m. Sunday, Oct. 13, in Edison Theatre. Professor Herbert E. Metz, PAA head of drama, will direct the 19th Century play, which he has called "probably the wittiest play written in the English language in the last hundred years."

Set and decor designer for the production is Marvin Morrison, the PAA's head technical director, who has chosen to utilize a false proscenium for the first time in Edison Theatre. The PAA's resident costumer, Ms. Niki Juncker, is costume designer for the play.

General admission is $3; WU faculty, staff and all students, $1.50.

News Briefs

The Jewish Hospital of St. Louis's new Sydney M. Shoenberg Pavilion, one of the major new facilities at the WU Medical Center, was dedicated recently. The $14 million, nine-story pavilion, which occupies 270,000 square feet, has three patient floors with 180 new beds, increasing the hospital's bed capacity to 628.

The Struc...
Calendar

October 3-9

THURSDAY, OCTOBER 3
4:15 p.m. Department of Anthropology Lecture, "In Pursuit of Archaic Subsistence Patterns in Western Kentucky," by WU professor Patty Jo Watson. McMillan cafeteria. Coffee at 3:45 p.m.


FRIDAY, OCTOBER 4

SATURDAY, OCTOBER 5
4:30 p.m. Old St. Louis Fish Fry. Francis Field. WU alumni, faculty, and staff, $3.50; WU students with ID cards, $1. For late reservations call the Alumni Office at 863-0100, ext. 4751.

MONDAY, OCTOBER 7
10:30 a.m. Departments of Civil Engineering, Mechanical Engineering, and Systems Science and Mathematics Seminar, "Convergence of Finite Element Approximations Near Singular Points," by Professor Pin Tong, WU Transportation Center. Cupples II, room 100.


4 p.m. Division of Biology and Biomedical Sciences Molecular Biology Program Seminar, "The Structure and Function of Pepsin and Pepsinogen," by Dr. Jordan Tang, head, Laboratory of Protein Studies, Oklahoma Medical Research Foundation. Carl V. Moore Auditorium, Cancer Research Building.

TUESDAY, OCTOBER 8
8:30 p.m. Tuesday Night Lecture Series, "A Man and his Ideas: A Chronicle of Their Emergence and Transitions," by Mike Karaffa, artist.

WEDNESDAY, OCTOBER 9


4 p.m. Division of Biology and Biomedical Sciences Cellular and Developmental Biology Seminar, "The Genetics of Sea Urchin Development," by Dr. Ralph Hinegardner.

Mike Karaffa will lead the Bears in a football game against Centre College at 1:30 p.m. Saturday, Oct. 5, which will highlight Homecoming Weekend at WU. Other activities are a fish fry at 4:30 p.m. Saturday adjacent to Francis Field, and the Red Rose Cotillion at 9 p.m. Friday. (Photo by Richard N. Levine)

Division of Natural Sciences, University of California at Santa Cruz. Carl V. Moore Auditorium, Cancer Research Building.

FILMS

FRIDAY, OCTOBER 4
7:30 and 10:30 p.m. Filmboard Series, "The Godfather," Wohl Center, Line D. Admission $1.

8:15 p.m. Regular Film Series, "Tokyo Story," Steinberg Auditorium. Also at 2:30 p.m. Sunday. Admission $1.50.

SATURDAY, OCTOBER 5

TUESDAY, OCTOBER 8

WEDNESDAY, OCTOBER 9
7:30 and 9:30 p.m. Filmboard Series, "The Harder They Come." Brown Hall Theatre. Admission $1.

SPORTS

SATURDAY, OCTOBER 5
1:30 p.m. Football, WU Battling Bears vs. Centre College at Francis Field. (Homecoming) Admission $3.50 reserved seats, $2.50 general admission, $1.25 non-WU students, free to WU students with current ID card.

EXHIBITIONS

Display of Picasso and Rouault Works from the WU Collection of Art, including Picasso’s "Les Femmes d’Alger," given by the late Mrs. Mark C. Steinberg, on exhibit for the first time. Lower level, center gallery of Steinberg Auditorium. Viewing hours: 8:30 a.m.-5 p.m. weekdays; 10 a.m.-4 p.m. Saturday; 1-5 p.m. Sunday.

Original Interpretations of Steinberg Auditorium. Viewing hours: 8:30 a.m.-5 p.m. weekdays; 10 a.m.-4 p.m. Saturday; 1-5 p.m. Sunday.


Memorabilia of the St. Louis Car Company, including scale models and photographs of vehicles built here from the 1880’s to 1973. Level Five, Olin Library. Viewing hours: 8:30 a.m.-5 p.m. weekdays.

Environmental Improvement Month Display of government documents on ecology, in observance of Johnny Horizon Month. Olin Library vestibule, Level 3. Viewing hours: 8 a.m.-midnight, Monday-Thursday; 8 a.m.-10 p.m. Friday; 9 a.m.-10 p.m. Saturday; 11 a.m.-midnight Sunday.

"Washington U. Has It All From A to Z," an exhibit of 17 black and white photographs by Peter Gegenheimer, a WU graduate student. Beaumont Lounge, Mallinckrodt Center. Viewing hours: 10 a.m.-midnight daily.

AIA Craftsmanship Awards Exhibit. Photographs and drawings by winners of the 1973 St. Louis Chapter, AIA construction craftsmanship competition. Givens Hall, first floor. Hours: 9 a.m.-9 p.m. daily.

NASA (Continued from page 1)

mid-August and mid-September, 1975. This mission, estimated to cost between $750 and $830 million (not including the launch vehicle), will take nearly a year to travel from Earth to Mars.

Having spent the past few years analyzing some 7000 Martian photographs, Arvidson is helping to evolve theories about what has been happening on the planet during preceding eons.

The clues, he explained, are in the black and white pictures which can be deciphered to reveal history, much as hieroglyphics divulge the mysteries of vanished peoples.

Professor Arvidson believes that most craters larger than about two miles in diameter haven’t been significantly eroded for about three and one-half billion years. Logically, one wouldn’t even expect to find such hoary craters, because under present-day conditions, with 150-mile-an-hour winds whipping across Mars, these giant holes in the planet’s surface should have been quickly eroded away. Dr. Arvidson’s research, however, demonstrates that these craters have not disappeared because they are peculiarly hard objects to erode relative to other features like the terrain between craters. Consequently, they can survive through the many fierce dust storms churned up by intense Martian winds.