PAA presents sophisticated Sondheim hit, "Company," April 30-May 2 at Edison

Company, Stephen Sondheim's four-time Tony Award-winning musical, with book by George Furth, will be presented by the Performing Arts Area at 8 p.m. April 30-May 2 in Edison Theatre. C. J. Zander, visiting assistant professor of drama, will direct the largely student-cast show, which is a satirical guide to the joys and pains of contemporary married life.

The show revolves around Robert, a bachelor with three girlfriends, and his relationships with five married couples. Worried about his remaining single and "lonely," each couple tries to expose Robert to the joys of being married. The antics of the matchmakers, however, prove that not all marriages are made in heaven.

"Stephen Sondheim has never written a more sophisticated, more pertinent, or more melodious score," wrote Walter Kerr in The New York Times, "and the lyrics are every bit as good." Sondheim's keen wit can be found in such memorable songs as "Another Hundred People," "The Ladies Who Lunch" and "Side by Side by Side." Company is a New York show and displays all the excitement and electricity of living in midtown Manhattan. Zander describes it as one of the first "concept" musicals because it deals with its subject in an adult, realistic manner.

The cast features Daniel Gipple in the role of Robert. The wives are played by Debbie Berman, Valerie Sandberg, Amy Silverberg, Andrea Stake and Lesley Tucker. Richard Dandrea, Allen Gardner, Andy Langton, Scott Scudder and Keith Shobodian play the husbands. Lisa Goldberg, Suzanne Grace and Janet Metz portray the girlfriends.

From the University faculty, Jack Brown serves as musical director. Suzanne Grace as choreographer, David Kruger as set designer, and Nancy Kay Webb as costume designer. Lighting is designed by David Stevens, a senior drama major.

Tickets are $5. The Edison Theatre box office number is 889-6543.

George B. Johnson wins Guggenheim; will study genetic factors in mutation

George B. Johnson, professor of biology and professor of genetics at the WU School of Medicine, has been granted a Guggenheim Fellowship for 1982. The fellowships are awarded by the John Simon Guggenheim Memorial Foundation to individuals on the basis of their demonstrated accomplishments in the past and strong promise for the future in science, scholarship and the arts. This year, a total of $5,070,000 was awarded to 277 scholars, scientists and artists from 3,200 applicants in the foundation's 58th annual competition.

Johnson will use his Guggenheim Fellowship to study genetic factors influencing mutation rates in fruit flies. An evolutionary biologist, he is interested in the relationship between ecology and population genetics.

Johnson received his PhD in biology from Stanford University in 1972 and joined the WU faculty shortly thereafter.

Washington University
Record

Volume 6, Number 2
April 29, 1982

SPIM scholar wins Marshall Scholarship

Craig T. Basson, an honors student at WU, has won a Marshall Scholarship providing two and possibly three years of all-expenses-paid study at a British university of his choice.

Following graduation from WU this May, he will study for a master's degree in physiology at Lincoln College, Oxford.

As an expression of British appreciation for the help Europe has received under the U.S. Marshall Plan, 30 scholarships are given each year to American students who have distinguished themselves by scholarly achievement and other activities, and who "display potential to make significant contributions to their society."

Approximately 1000 college students apply for the scholarships each year. The awards are made initially for two years, but in some instances are extended to three. They meet all the costs of tuition and maintenance in Britain, with "a little left over" to encourage wider travel during vacations.

Basson, valedictorian at Roslyn High School, Roslyn Heights, N.Y., spent summer vacations during high school studying anatomy on a research fellowship at the University of Iowa; taking a preceptorship in surgery with Dr. Michael F. DeBakey at Baylor College of Medicine, Houston, Tex.; studying inorganic chemistry at Harvard; and in oncology research with Garth Nicholson at M.D. Anderson Hospital at the University of Texas.

He enrolled at WU in the Scholars Program in Medicine (SPIM), where incoming students are guaranteed admission to the WU School of Medicine, as long as a certain level of undergraduate work is maintained. Free to diversify his premedical studies, Basson will graduate with a major in French as well as in biology. He is completing his undergraduate studies in three years instead of four, having won class honors every year.

Elected a member of Sigma Xi, the national science honorary, Basson was promoted to full membership this spring.

While studying at Oxford, he plans to complete work on a master's degree in biology from WU. Upon his return he will enter the School of Medicine.

Basson's undergraduate thesis is on attitudes toward science and medicine in 18th-century French drama. He is editor of Subject to Change, a WU student quarterly magazine.
Researchers net record catch of meteorites at earth's pole

To see a shooting star is supposed to be lucky. To find one is even luckier. Most of the millions of meteorites that fall to earth either disintegrate, sink forever beneath the sea, or are后来 buried by the earth’s geology.

Antarctica is one place where meteorites abound. WU geologist Ghislaine Crozaz was a member of the five-person team that executed America’s largest and most successful trip to prospect meteorites in Antarctica. During a 33-day bivouac last December and January, the group combed the pristine wilderness on the New Zealand side of Antarctica and bagged 314 new specimens — a U.S. record and the third most successful one-season effort by any research team.

The team consisted of Crozaz; group leader William Cassidy of the University of Pittsburgh; Ursula Marvin and Robert Fudali, both of the Smithsonian Institution; and mountaineer John Schutt of Spokane, Wash.

Last December 3, the team arrived at McMurdo Station, a frozen frontier town on the coastal side of the Transantarctic Mountain Range. Two weeks of survival training prepared them for the journey by helicopter across the mountains to a wilderness campsite near the Allan Hills.

Blue ice is the element that makes meteorite preservation in large quantities possible. Normally, glistening ice creeps from Antarctica’s frozen outback to the sea, then floats away as icebergs. When mountain ranges block its path, however, a glacier buckles, forcing ancient layers upward. Blizzard-force winds scour the hard ice clean. The result is that charted, black meteorites become exposed and stand out starkly against the blue surface.

The group used five snowmobiles for transportation and fanned outward from the base camp in grid formations, using with four kinds of meteorites. The vast majority were “ordinary mony chondrite,” Crozaz said, believed to be pieces of asteroids. Stony chondrites were formed about 4.5 billion years ago and are considered the most primitive rocks available for study.

The other specimens found include “achondrites,” which probably came from asteroids large enough, some 4.6 billion years ago, to produce lava, and meteorites composed entirely of iron, believed to have formed in an asteroid’s core. The fourth type, “carbonaceous chondrite,” contains amino acids of nonbiological origin, and probably originated in the solar nebula — the cloud of dust and gas from which the planets were formed.

Crozaz is studying two aspects of meteorites. She examines their thermal history for clues to their origins. And she studies the cosmic rays that meteorites have absorbed to see how these are different from the cosmic rays the earth receives today.

Although the expedition arrived in Antarctica at the height of its summer tourist season, temperatures at the base camp hovered near zero degrees Fahrenheit, and the wind sometimes reached 50 m.p.h.

Crozaz said the team put on their thermal underwear and waded into the cold before they ventured out. Sometimes, you wonder why you put yourself in such a situation,” she said. “And then afterwards, everything is forgotten.”

The smallest things from nature can tell the story of a civilization that flourished centuries ago. Objects, such as seeds, can reveal the mysteries of the past and give some direction for the future, says David L. Bowman, associate professor of anthropology and director of the Archaeo-Botanical Laboratory in McMillan Hall.

The laboratory, founded in 1974, houses a collection of over 500 varieties of seeds that are used to help identify seeds found at archaeological digs. Useful because they are carbonized, the seeds are the most common tools for identifying the diet reconstituted from such seeds.

Most of the seeds on file in the laboratory are common to North, South and Middle America. Many WU anthroplogy students, however, have been bringing seeds from other areas of the world, such as Egypt, to expand the collection.

Seeds can say many things about a culture that other artifacts cannot. For example, when seeds of exotic plants are discovered in an area, they suggest trade between the peoples of that area and of the plant’s native region. Seeds have also supplemented archaeologists' knowledge about past environments.

The meteorites were kept frozen to prevent terrestrial contamination. For 17 years, the library has preserved seeds from the base camp and the bivouac sites, worming seeds from 800 A.D. and small portions of the diet of Indians living in that area area on corn, indicating a change from hunting and gathering to cultivation of crops. Measuring the different varieties of corn and beans that make up the largest number of seeds in the collection is the job of Leonard Blake. Blake, an amateur archaeologist who retired as a security analyst from the St. Louis Union Trust Co. 17 years ago, works part-time in the laboratory measuring seeds and corn cobs to determine their race and origin. Blake has worked with archaeologists on over 400 sites in the Midwest.

Blake began his avocation over 20 years ago, measuring corn under the direction of Hugh Cutler at the Missouri Botanical Garden. Now, he divides his time between WU’s archaeo-botanical laboratory and the Museum of Science and Natural History on Big Bend Blvd., where he is a volunteer cataloger.

Two other laboratories are used by WU anthropologists and archaeologists. The Laboratory of Primitive Biology, directed by Robert W. Susman, associate professor of anthropology, is used to study bones and tissues of primates. At the Laboratory of Dental Anthropology, directed by Steven Molnar, professor of anthropology, dental development and wear patterns are examined. All three anthropology labs use small elements — seeds, bits of bone and teeth — to link the present with the past.

These ancient minutiae can also help solve present problems like world hunger. Plants regarded as weeds today were food to the Indians centuries ago, Bowman said. Since many of these plants grow in difficult soils and climates, they could be used in Third World countries where other crops have failed.

Ghislaine Crozaz, WU associate professor of earth and planetary sciences, at the Allan Hills campsite, Antarctica, during a U.S. expedition to collect meteorites last January.
Women paddle to concrete win in annual engineers' canoe race

The race was to the swift, and the glory to the women when WU civil engineering students joined battle with the University of Missouri at Rolla and the Concrete Masons of St. Louis in a concrete canoe contest April 18.

In keeping with a now seven-year-old tradition, the WU student chapter of the American Society of Civil Engineers designed and constructed a 16-foot-long concrete canoe for a series of quarter-mile races at a Forest Park lake.

WU won first place in the women's division, plus a citation for best design and construction. In the faculty and junior men's division, WU placed second, and in the senior men's division, third, for the overall second place award. The Concrete Masons won first place overall.

WU's 226-pound canoe, built with special lightweight aggregates and air entraining additives, developed a slight hydraulic problem during one of the men's races, reported senior Michael Nobs. "Water sprayed over the front of the canoe, and we were forced to abandon ship. A concrete deflector to eliminate spray was added to the bow before a regional race April 24 in Peoria, III.

Campus Notes

Noot Gilliani, associate professor of mechanical engineering and a member of the WU Center for Air Pollution Impact and Trend Analysis (CAPITA), has received a three-year, $400,000 grant from the Environmental Protection Agency. The grant, "Management and Analysis of Data of EPA-Sponsored Field Studies," is a sequel to a similar grant about to expire. Gilliani, who established the Special Studies Data Center at CAPITA, has participated in a number of EPA studies of power plant and urban plumes, including the transport and chemical transformation of emissions from these sources, as well as the phenomenon of multi-state haziness in the eastern United States.

Victor T. Le Vine, professor of political science and currently visiting Fulbright professor at the University of Yaounde, Cameroon, lectured in Gabon and the Congo last month as part of the U.S. Communications Agency's "Ampart" program, in which American scholars are asked to speak on their specialties in various African countries. Le Vine visited schools, universities, cultural centers, and research institutions, speaking on aspects of American foreign policy in Africa and elsewhere. It was his second tour under USICA auspices: in 1981 he visited Paris, the Ivory Coast, Togo, Nigeria, Ghana, and Zaire. In May, he will also lecture in Kinshasa, Zaire. Le Vine will return to the WU campus this fall.

Jane Loewingr, professor of psychology, was an invited participant in the Henry A. Murray Lectures in Personality, presented by Michigan State University April 16 and 17. These lectures are designed to provide leading psychologists with a forum at which to address major issues in the science of personality.

"The Architectural Heritage of St. Louis, 1803-1891," exhibition, which was organized by Lawrence Lowic, assistant professor in the Department of Art and Archaeology, and originally displayed in the WU Gallery of Art, is on view at the St. Louis Mercantile Library, 510 Locust St. through June 18. Lowie, who also wrote the catalogue for this show, will serve as guest curator. The Mercantile display is sponsored by the National Endowment for the Arts, the Missouri Arts Council, and WU's School of Architecture, Department of Art and Archaeology, and Gallery of Art. Viewing hours are 9 a.m. to 5 p.m., weekdays.

Jon P. Rogers, a graduate student in mechanical engineering, is the fourth WU student to be named a national winner of the Robert L. Lichten Award. The award is given annually by the American Helicopter Society for the best technical paper presented by a new author. This year, for the first time, the competition resulted in a deadlock with two co-winners. The other award recipient is from the NASA Ames Research Laboratory.

Rogers' winning paper, "Application of an Axisymmetric Model for Dynamic Analysis of Rotor Blades," is a pioneering effort that uses mathematical theories to describe the forces and motions of a helicopter rotor blade. He will receive a cash prize of $250 and an expense-paid trip to the society's annual meeting in Los Angeles.

The Lichten Award was established in 1976 in memory of Robert Lichten, a noted helicopter engineer. Of the eight national winners in the history of the award, four have been WU students: Rogers, 1982; Shih-Yaun Chen, 1981; Ivo Zvolanek, 1979; and Debasish Banerjee, 1977.

Three WU graphics illustration majors are among 172 U.S. college students whose works or art have been shown for a display in the 1982 Student Scholarship Exhibition by the Society of Illustrators. All of the winning illustrations are on view through May 9 at The Museum of American Illustration, New York City. Two students each received a $200 award. They are junior Linda Thomas, whose illustration, "The Pierre, New York, N.Y." is shown above left, and senior Christine M. Fordreter, who drew the portrait of rock star Mick Jagger. The other WU student represented in the show is senior Erin Murphy ("Rip") Kastaris.

Two students selected for Crossroads Africa

Erie Sampson, a senior in the College of Arts and Sciences, and Gerald Laster, a graduate student in the School of Social Work, have been selected to take part in the Operation Crossroads Africa program this summer.

The students will work in one or several rural African development projects. They might be assigned to build schools, health clinics or community centers or work in agricultural and veterinary projects.

WU students have participated for the last 15 years in the program, which is based in New York City and was the forerunner of the Peace Corps. The 25-year-old program has sent more than 7,500 American students to 34 English- and French-speaking African countries.

The two students are currently raising funds to finance their trip. Donations may be sent in the form of a check to the Black Studies Program, Box 5690, University of Missouri at Rolla, and the Concrete Masons of St. Louis in a concrete canoe contest April 18.

In keeping with a now seven-year-old tradition, the WU student chapter of the American Society of Civil Engineers designed and constructed a 16-foot-long concrete canoe for a series of quarter-mile races at a Forest Park lake.

WU won first place in the women's division, plus a citation for best design and construction. In the faculty and junior men's division, WU placed second, and in the senior men's division, third, for the overall second place award. The Concrete Masons won first place overall.

WU's 226-pound canoe, built with special lightweight aggregates and air entraining additives, developed a slight hydraulic problem during one of the men's races, reported senior Michael Nobs. "Water sprayed over the front of the canoe, and we were forced to abandon ship. A concrete deflector to eliminate spray was added to the bow before a regional race April 24 in Peoria, III.

Campus Notes

Noot Gilliani, associate professor of mechanical engineering and a member of the WU Center for Air Pollution Impact and Trend Analysis (CAPITA), has received a three-year, $400,000 grant from the Environmental Protection Agency. The grant, "Management and Analysis of Data of EPA-Sponsored Field Studies," is a sequel to a similar grant about to expire. Gilliani, who established the Special Studies Data Center at CAPITA, has participated in a number of EPA studies of power plant and urban plumes, including the transport and chemical transformation of emissions from these sources, as well as the phenomenon of multi-state haziness in the eastern United States.

Victor T. Le Vine, professor of political science and currently visiting Fulbright professor at the University of Yaounde, Cameroon, lectured in Gabon and the Congo last month as part of the U.S. Communications Agency's "Ampart" program, in which American scholars are asked to speak on their specialties in various African countries. Le Vine visited schools, universities, cultural centers, and research institutions, speaking on aspects of American foreign policy in Africa and elsewhere. It was his second tour under USICA auspices: in 1981 he visited Paris, the Ivory Coast, Togo, Nigeria, Ghana, and Zaire. In May, he will also lecture in Kinshasa, Zaire. Le Vine will return to the WU campus this fall.

Jane Loewingr, professor of psychology, was an invited participant in the Henry A. Murray Lectures in Personality, presented by Michigan State University April 16 and 17. These lectures are designed to provide leading psychologists with a forum at which to address major issues in the science of personality.

"The Architectural Heritage of St. Louis, 1803-1891," exhibition, which was organized by Lawrence Lowic, assistant professor in the Department of Art and Archaeology, and originally displayed in the WU Gallery of Art, is on view at the St. Louis Mercantile Library, 510 Locust St. through June 18. Lowie, who also wrote the catalogue for this show, will serve as guest curator. The Mercantile display is sponsored by the National Endowment for the Arts, the Missouri Arts Council, and WU's School of Architecture, Department of Art and Archaeology, and Gallery of Art. Viewing hours are 9 a.m. to 5 p.m., weekdays.

Jon P. Rogers, a graduate student in mechanical engineering, is the fourth WU student to be named a national winner of the Robert L. Lichten Award. The award is given annually by the American Helicopter Society for the best technical paper presented by a new author. This year, for the first time, the competition resulted in a deadlock with two co-winners. The other award recipient is from the NASA Ames Research Laboratory.

Rogers' winning paper, "Application of an Axisymmetric Model for Dynamic Analysis of Rotor Blades," is a pioneering effort that uses mathematical theories to describe the forces and motions of a helicopter rotor blade. He will receive a cash prize of $250 and an expense-paid trip to the society's annual meeting in Los Angeles.

The Lichten Award was established in 1976 in memory of Robert Lichten, a noted helicopter engineer. Of the eight national winners in the history of the award, four have been WU students: Rogers, 1982; Shih-Yaun Chen, 1981; Ivo Zvolanek, 1979; and Debasish Banerjee, 1977.

Three WU graphics illustration majors are among 172 U.S. college students whose works or art have been shown for a display in the 1982 Student Scholarship Exhibition by the Society of Illustrators. All of the winning illustrations are on view through May 9 at The Museum of American Illustration, New York City. Two students each received a $200 award. They are junior Linda Thomas, whose illustration, "The Pierre, New York, N.Y." is shown above left, and senior Christine M. Fordreter, who drew the portrait of rock star Mick Jagger. The other WU student represented in the show is senior Erin Murphy ("Rip") Kastaris.
Field research grants offered through Earthwatch

Grants ranging from $5,000 to $50,000 for field research projects in the humanities and sciences anywhere in the world have been announced by Earthwatch. Postdoctoral scholars of all nationalities who will employ qualified members of Earthwatch on their research teams are eligible. Letters of intent should be submitted as early as possible; full proposals are invited upon favorable review of proposals and are due no later than nine months before the project date. Decisions are made after both internal and external peer review. For information and applications, write the Center for Field Research, 10 Juniper Rd., Box 127, Belmont, Mass. 02178 or call (617) 489-3032.

Exhibitions

"Master of Fine Arts Thesis Exhibition, Part II," a collection of works by WU School of Fine Arts students. Bixby Hall Gallery and Upper Gallery. WU Gallery of Art, Steinberg Hall. Baby hours are 10 a.m.-4 p.m. weekdays; 1-5 p.m. weekends. Gallery of Art hours are 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Through May 19.


"Women Writers," a collection of monographs, photographs and writings by women. Third Floor, Old Library. 8:30 a.m.-5 p.m. weekdays. Through May 9.

Music

Thursday, April 29
8 p.m. Department of Music Graduate Student Recital, with Linda Forgione, tenor. Graham Chapel.

Friday, April 30
4 p.m. Department of Music Graduate Recital with Jim Harris, baroque flute and recorder. Graham Chapel.

Saturday, May 1
10 a.m.-5 p.m. Department of Music Jazz Concert, directed by Kim M. Pursn, WU instructor in music. WU's Edison Theatre.

Sunday, May 2
4 p.m. Department of Music Graduate Recital with Jim Harris, baroque flute and recorder. Graham Chapel.

Sports

Saturday, May 1
1 p.m. Baseball Doubleheader, WU vs. Drury U. Utz Field.

Sunday, May 2
1 p.m. Baseball Doubleheader, WU vs. Rose-Hulman Inst. Utz Field.

Performing Arts

Friday, April 30
8 p.m. Performing Arts Ensemble Production, Company, a musical dealing with friendship, love and survival in the big city. Music and lyrics by Stephen Sondheim, book by George Furth. Edison Theatre. Directed by WU visiting professor of drama, C. J. Zander. Tickets are $1, available at Edison Theatre box office, 889-6543. (Also Sat., May 1 and Sun., May 2, 8 p.m., Edison.)

Films

Thursday, April 29
7:30 and 9:45 p.m. WU Filmboard Series, "The Trojan Women", WU's Edison Theatre.

Friday, April 30
7:30 and 9:30 p.m. WU Filmboard Series. (To be announced). $2. Brown Hall Aud. (Also Sat., May 1, same time, Brown.)

Sunday, May 2
7:30 and 9:30 p.m. WU Filmboard Series, "Caretake From the Black Lagoon" (1-D). $2. (Also Sat., May 1, same times, Brown.)

Calendar Deadline

The deadline to submit items for the calendar period of May 13-22 is April 29. Items must be typed and must be submitted in the form of cards only; no telephone messages will be accepted. Include title, name and telephone number. Address items to Susan Kesling, calendar editor, Box 1142.