On June 3 WU and the Monsanto Company of St. Louis signed a $23.5 million, five-year agreement to collaborate in biomedical research. In addition to the size of the contract — one of the largest ever agreed upon by a university and a corporation — its particulars have inspired the curiosity of the nation's media.

New York Times education writer Edward Fiske, speculating on the implications for WU, wrote, "Similar agreements by Harvard, the Massachusetts Institute of Technology, and other major universities have led to controversy over potential conflicts of interest, and Monsanto and Washington University took pains to emphasize that steps had been taken to minimize such possibilities."

"Everything is carefully designed to enable the University to be true to its fundamental purposes," Howard Schneideman, Monsanto's senior vice president for research and development, told Fiske.

The major terms of the contract call for an eight-person advisory committee composed of four representatives from each institution to solicit research proposals from the WU faculty-at-large. The committee will review and approve applications from the WU faculty-at-large. The research will involve study of "a wide variety of diseases for which there isn't a clear-cut therapy." Such diseases, he said, might include allergies, cancer, rheumatoid arthritis, neurological diseases and hypertension.

The interest of Monsanto in pursuing biomedical research is no surprise to insiders. In a Wall Street Journal article, reporter Dale Singer wrote, "The giant chemical company previously had expressed an interest in expanding its role in health care." Monsanto already manufactures large quantities of aspirin and acetaminophen — the active ingredient in Tylenol.

Both institutions have engaged in similar agreements in the past. Monsanto has been funding research at Harvard since 1974 on the molecular basis of organ development. Last September, WU began a collaborative agreement with Mallinckrodt Inc. — a St. Louis-based chemical and pharmaceutical maker — which is funding $5.9 million worth of research in the area of hybridoma antibodies. And WU and Monsanto are now operating under a $1.5 million agreement to fund similar hybridoma research.

In addition to Kipnis, the three University members of the advisory committee will be Luis Glaser (head of the Department of Biological Chemistry), Paul Lacy (Mallinckrodt Professor of Pharmacology and head of the Department of Pathology), and Joseph Davie (head of the Department of Microbiology and Immunology).

For Monsanto, the four advisory committee members will be Louis Fernandez (vice chairman of Monsanto), Schneideman, G. Edward Paget (director, biomedical program), and David Tierney (science fellow). Any action to approve or disapprove funding, to set funding amounts or to discontinue funding will come about by a decision of this committee.

The advisory committee will allocate 30 percent of its funding to exploratory or fundamental research in proteins and peptides. The other 70 percent will go toward the support of more applied "specialty" projects for which there is significant public need and potential commercial utility in terms of technologies or products.

The University faculty members will be at liberty to publish the results of any research they do under the Monsanto funding. Monsanto, however, will exercise the right of prior review of such material if it contains potentially patentable technical developments. If so, Monsanto can request a short delay of submission for publication or other public disclosure in order to begin the patent process. Such review is necessary because many foreign patent laws require the filing of patent applications before public disclosure of inventions.

Monsanto will pay for and carry out the entire patenting process. If Monsanto does not elect to license a patent, the University is free to license such patents to others.

The contract also contains important provisions continued on p. 3

 Libraries acquire Hoopes collection of Orientalia from curator's widow

A collection of books on Chinese and Japanese art, history, languages and literature and Japanese arms and armour from the library of the late Thomas T. Hoopes, former curator of the St. Louis Art Museum, has been donated to the WU Libraries by his widow, Catherine Hoopes, of St. Louis.

The donation contains a noteworthy collection of more than 300 books about Japanese arms and armour, among them, H. Sugawara's Koto Musaon Dattom, an encyclopedia of sword ornaments and decorations, published in Japan in 1791. The arms and armour book collection also contains an encyclopedia detailing the family trees of Japanese swordsmiths by W. Hawley, and Muras Inoue's Swords of the Samurai: The Splendors of Japanese Sword Furniture (1967). Sword furniture, says Sachiko K. Morell, acting WU East Asian librarian, is furniture decorated with swords and other pieces of armour made after the wearing of the swords in public in Japan was prohibited by Imperial edict in the late 19th century.

Other books of interest are a Chinese language dictionary published in 1806, a book of Tibetan grammar by H. A. Laske, published in 1954, several books on Chinese and Japanese history and literature and books detailing aspects of Chinese and Japanese art.

The volumes are in Japanese, Chinese, German, French and English. Morell said, and the older books are printed on doubleleaf rice paper.

Before coming to St. Louis in 1936, Thomas T. Hoopes conducted research in Japan on behalf of the Metropolitan Museum of New York City as assistant curator of the Arms and Armour section. Hoopes was curator of the St. Louis Art Museum from 1936 until his retirement in 1964. He died in 1981. His wife, Catherine Hoopes, is a WU alumna.

The collection will be housed according to subject in the East Asian Library, the Art and Architecture Library and Special Collections.

This portrait of Sugawara no Michizane, a Japanese political leader, scholar and literary figure of the middle Heian period (897-1185 A.D.) is from an illustrated encyclopedia of Japanese culture compiled by K. Amata in 1982.
Windegger Foundation to provide scholarships to WU, St. Louis U.

A multi-million dollar Jeanette L. Windegger Educational Foundation has been established by the St. Louis woman to provide scholarships at WU and St. Louis University for residents of Missouri and of the St. Louis metropolitan area east of the Mississippi.

In making the announcement, a spokesman for the foundation said, "It is Mrs. Windegger's hope that the scholarships will encourage the most highly qualified and most promising young people to seek their education in the St. Louis community and that the same young people will thereafter remain in and contribute to the economic and cultural growth and well-being of the community."

Income from the foundation will be divided equally between the two private universities. Awards are to be made for one academic year but can be renewed for additional years as determined by the scholarship committee.

Host families needed for international students

Each year, more than 600 international students enroll at WU. One of the best ways they can become acquainted with Americans and their culture is through WU's Host Family Program.

The Host Family Committee is looking for host families who will "adopt" a student — invite them for dinner occasionally, include them in holiday celebrations and perhaps show them around St. Louis. In the past, only 35 to 40 students a year have been placed through the program because of a shortage of volunteering families.

"Some of the students are under-graduates but most are graduate students studying in technical disciplines not available in their home countries," said William S. Stone, director of the International Office. "Most of these young men and women have not been to the United States before arriving in St. Louis. They are eager to make friends and learn about our country, as well as study in their fields."

Stone added that the American families involved in this program can "learn more about another country than they would in National Geographic." "Families can gain more understanding of other areas of our world and form friendships that will last longer than the year or years the students are enrolled at WU," Stone said.

Families who would like more information about the program should call Diane Hasly at 889-5901 or Jo Ruckdahl at 527-5301.

Art student wins Women's Society scholarship

Paul A. Breuer, of St. Louis County, has received a full two-year scholarship to complete his studies at WU. The scholarship, awarded annually since 1975 by the Women's Society of WU, is given to an outstanding student finishing work at the St. Louis Community College (a two-year junior college) who is not only a scholar, but also a superior athlete and someone who can contribute to the campus community.

Breuer was a student at the Florissant Valley campus of the St. Louis Community College, where he maintained a 3.90 scholastic average.

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WU pioneers hearing test for infants as young as newborns

Until recently, accurate assessment of the hearing of an infant or a very young child was extremely difficult, if not impossible. A pioneering facility at the WU Medical Center now tests infants as young as newborns for the low, mid and high frequencies that occur in the range of sound used in speech.

The test, called brainstem electrical response audiometry, was developed in 1976 by Hallowell Davis, WU professor emeritus of physiology and director of research emeritus at the Central Institute for the Deaf, and his research assistant, Shirley Hirsh.

Working with other researchers from the Central Institute for the Deaf and the WU Department of Speech and Hearing, they established a facility at St. Louis Children's Hospital that was the first in the midwest and one of the first nationwide to test the hearing of infants. Using an averaging computer, brief electrical responses to sounds originating in the region of the brainstem are analyzed, and the results used to assess how well the auditory system is functioning. This data, together with tympanometry, a test of middle-ear function, and any behavioral information available, make it possible to identify a hearing impairment and begin rehabilitation with a hearing aid and special education. Parents who bring their children to the facility from throughout the midwest, are counseled about services in their area, and referred back to their own physician or audiologist.

Most of the children tested were under 3 years of age. They are referred to the service for a variety of reasons: delayed language development, inconsistent response to sound or a high risk of hearing impairment from other causes. Older children may be tested because multiple handicaps, mental retardation, hyperactivity, or emotional disturbance render them unsuitable by behavioral audiometry. Sedation, possible in a hospital setting, allows a reliable assessment of even difficult-to-test children. Many such tests are conducted at the request of state or local social agencies, and in six years of service, well over 1,000 children have been examined.

Brainstem electrical response audiometry continues to be evaluated and refined with ongoing research. The research team includes Davis; Hirsh; Gerald Popelka, associate professor of audiology in speech and hearing; Kenneth Faw, assistant professor of oto-laryngology; and Linda Turpin and Mary Pearte of the Central Institute for the Deaf.

WU changes carriers; coverage unchanged

As of July 1, 1982, the University's Life Insurance Plan transferred from the Equitable Life Assurance Society to the Traders Insurance and Annuity Association.

There were no changes in the provisions of the plan, and there was no interruption of coverage for any insured employee. The existing employee contributions remain in effect.

Insured employees are not required to re-enroll with the new carrier, and all beneficiary designations and assignments remain in effect.

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Editor: Charlotte Boman
Calendar Editor: King McKelvey (Ext. 3203)
**Faculty receive promotions**

The following faculty members received promotions.

**Hilltop Campus**  
(As of July 1, 1982)

Beth A. Carlin, to associate professor of obstetrics and gynecology; Douglas Brake La Pierre, to professor of earth and planetary sciences; Wallace B. Diboll, Jr., to professor of neurology; David E. Echols, to professor of earth and planetary sciences; A. Maynard Engelbrecht, to associate professor of physiology; Lloyd J. Falck, to associate professor in the Department of Speech and Hearing in the Faculty of Arts and Sciences.

Jain Fraser, to associate professor of architecture; Utulwa B. Goodenough, to professor of biochemistry; Babu Joseph, to associate professor of chemical engineering; Douglas Bruce La Pierre, to professor of law; Joseph F. Loewenstein, to associate professor of English; Hylarie McMahon, to professor of art; Charles R. McManis, to professor of law; Laurence H. Meyer, to associate professor of pathology; David P. Pacoe, to associate professor of audiology in the Department of Speech and Hearing in the Faculty of Arts and Sciences; George I. Zahalka, to professor of mechanical engineering.

**School of Dental Medicine**  
(As of May 1, 1982)

Marc Abrams, to associate professor of oral and maxillofacial surgery; Richard W. Brand, to professor of anatomy in biomedical sciences; William D. Gay, to associate professor of maxillofacial prosthodontics; Gregory Hoeltzel, to associate professor (part-time) of orthodontics; Navasal L. Simons, to associate professor (part-time) of dental education; Monica Strong, to associate professor (part-time) of dental hygiene; Herman Turner, to associate professor (part-time) of oral and maxillofacial surgery; Herbert Weiner captures a child's fascination with sculpture by Alexander Calder in this photograph, one of many in an exhibition at the Mitchell Museum, Mount Vernon, Ill., through July 11. Weiner, head of the University's Photographic Services and WU adjunct professor of fine arts, met the late artist in 1964 when he came to WU for the installation of his sculpture, "Five Rudder," at the university's Art Gallery. The artist photographed the sculpture in his New England studio; a retrospective exhibition of the artist's work will also be held at the Gutherie Museum (the location of the photograph above). At a Calder show at the WU Gallery of Art in the mid-1960s. Viewing hours at the Mitchell are Tuesday through Sunday from 1-5 p.m.

Burtton M. Wheeler, WU professor of English and religious studies, is serving as an 18-member panel selected by the Association of American Medical Colleges to make a three-year study of the general professional education of the physician — the eight years that include college preparation and medical school. He and his fellow panelists were recently asked to comment on a document that focused on clinical education, biomedical sciences education and college preparation.

W. Michael Wolverton, a graduate student in the Sever Institute of Technology, presented a paper entitled "Correlation of NTD-Silicon Rod and Slice Resistivity" at the Fourth Internation Association on Reconstructive Therapy Conference on June 2 at the National Bureau of Standards in Gaithersburg, Md. Wolverton is doing research toward an MS degree in mechanical engineering. He is an employee of the Monsanto Division at St. Peters, Mo.

The following faculty members received promotions.

School of Medicine  
(As of June 15, 1982)

Charles Abramson, to associate professor of clinical radiology; Parvaneh Ahmed, to clinical assistant professor of pathology; Bernardo G. Aleskander, to associate professor of pathology; Hans Dieter Ambs, to research assistant professor of medicine (cardiology); Barbara Ann Alden, to assistant professor of pathology; Thomas M. Aune, to assistant professor of pathology; Stephen J. Barenkamp, to assistant professor of pediatrics; Wagh Abdel Bar, to assistant professor of pathology (visiting staff); Jack Barrow, to associate professor of clinical medicine; Eugene A. Bauer, to professor of dermatology; Daniel R. Biello, to associate professor of radiology; William G. Bowen, to assistant professor of clinical medicine; Thomas J. Braciale, to associate professor of pathology; Max Burgdorf, to assistant professor of pediatrics; William J. Catalona, to professor of surgery (urology); Dierm-Ming Ben Chen, to assistant professor of cancer biology (radiology); Theodore L. Cicero, to professor of neurobiology; Howard Brent Clark, to assistant professor of pathology; David B. Clifford, to assistant professor of pathology; James M. Corry, to assistant professor of clinical pediatrics; James P. Crane, to associate professor of ophthalmology and gynecology; Jack L. Crouahan, to associate professor of psychiatry; Arnold Dankner, to associate professor of clinical medicine; Sheldon L. Davis, to assistant professor of clinical otorhinolaryngology; Katherine DeShaywter, to assistant professor of clinical pediatrics; Donald H. Dayton, to assistant professor of clinical pediatrics; Jeffrey T. Feinstein, to assistant professor of clinical otorhinolaryngology; Michael D. Gist, to associate professor of obstetrics and gynecology; Lous A. Gilula, to professor of radiology; Marie H. Greider, to professor of pathology; William M. Hart, Jr., to associate professor of ophthalmology; Boyd K. Hatton, to professor of neurobiology; Rexford L. Hill III, to assistant professor of computer applications in radiology;

Barbel Holmest, to associate professor of surgery (plastic and reconstructive surgery); Keith A. Hruska, to associate professor of radiology; Owen S. Karner, to associate professor of clinical medicine; Jack Kayes, to associate professor of clinical otorhinolaryngology; Gerald Kessler, to professor of pathology; Michael R. Killbourn, to associate professor of radiation sciences in radiology; Terence G. Klinege, to associate professor of clinical otorhinolaryngology; Philip E. Korenblatt, to associate professor of clinical medicine; Anthony Kuczycki, Jr., to associate professor of medicine; Jack H. Lademann, to associate professor of clinical chemistry and medicine; Joseph K. T. Lee, to associate professor of pathology; Joseph Levitt, to associate professor of clinical medicine; Stanley B. Lin, to assistant professor of clinical pediatrics; Richard P. MacDerment, to associate professor of medicine; James E. Marks, to professor of radiology; Ralph F. Kuhlman, to associate professor of clinical medicine; Anthony Kuczycki, Jr., to associate professor of medicine; Robert A. Rouse, to associate director of the Center for the Study of Data Processing at the FORUM of the Missouri Computer Facilitating Committee. He is the founder of the Computing Education Committee, to the FORUM of the Missouri Computer Facilitating Committee. The FORUM was held in late April at the University of Missouri-Columbia.

Robert J. Benson, associate vice chancellor and director of WU's Computing Facility is the 1982 chairman of the Computing Facilitating Committee, a consortium of institutions of higher education in Missouri.

Susan Waugh, visiting associate professor in women's studies and English, has been chosen as a participant in the "Reconstructing American Literature" project at Yale University this summer.

James A. Wells, has been appointed to the staff of the Yale School of Medicine as a postdoctoral fellow in epidemiology and public health. Wells will be leaving WU from his position as assistant professor of sociology. He will be pursuing his research on psychosocial stress and disease.

Mathemetician Haimo dies; 35 years on WU faculty

Franklin Haimo, professor of mathematics at WU, died June 3 at Barnes Hospital after a short illness.

Haimo, 62 years old, taught mathematics at WU since 1947. In recent years, he also participated in seminars about Swedish current events for the AAM.

He was elected to the Institute for Advanced Study at Princeton in the 1972-73 academic year and returned there each summer for research as a visiting fellow.

**Monsanto—continued from p. 3**

provisions for cooperative efforts between Monsanto and WU. Monsanto scientists and technicians will spend time in University laboratories learning new techniques and information, and University scientists will have access to Monsanto facilities (such as isolation and tissue culture facilities) and materials.

The schedule for funding is indexed to 1982 dollar values, so that funding will increase in proportion to inflation.

In the third year of the agreement, and every two years thereafter, Monsanto and the University will have a joint scientific review panel made up of representatives from both institutions (and with both participating institutions. In the third year, it will also be determined if it is in the best interests of both parties to continue funding beyond the presently agreed upon five years.
**Calendar**

**Special Events**

**Sunday, July 4**
8:30 p.m. 49th Annual Fireworks Display, sponsored by the Clayton Firemen and Policemen Retirement Association. WU Francis Field. Tickets are $3 at the gate or in advance. Call 727-8100.

**Monday, July 19**
Teache WU Summer Dance Institute, a nationally renowned, intensive dance program for professional dancers, instructors, therapists and students. Through Aug. 7. For information and to enroll, call 869-6720 or 889-5858.

**Music**

**Tuesday, July 27**
8 p.m. Nightmusic Concert with Paul Kasica, flute; Orchestra of St. Louis, and instructor of music, CASA, and Don Hinkel, guitar, instructor of music, Webster College. Gargoyle, Mallinckrodt Center. No charge.

**Wednesday, July 1**
8 p.m. Composer's Concert featuring Bill Patterson, graduate student in music composition. Graham Chapel. No charge.

**Exhibitions**

"Core Show," a collection of drawings and designs by students in the School of Fine Arts. Bailey Hall. Hours are 10 a.m.-4 p.m. weekdays, closed weekends. Through Aug. 28.

"Fools Are My Theme, Let Satire Be My Song," a collection of classical satire from Aesop and Athenophiles to Mark Twain and Kurt Vonnegut. Includes a manuscript letter written by Mark Twain and a rare edition of Voltaire's Candide. Special Collections, fifth floor, Olin Library. 8:30 a.m.-5 p.m. weekdays; 1-5 p.m. weekends. Through Aug. 31.

**Calendar Deadline**

The deadline to submit items for the August calendar of the WU Record is July 22. Items must be typed and state time, date, place, nature of event, sponsor and admission cost. Incomplete items will not be printed. If available, include speaker name and identification and the title of the event. Those submitting items, please note name and telephone number. Address items to King McElroy, calendar editor, Box 1142.

**Promotions** — continued from p. 3

Professor of clinical medicine; James G. Miller, to research associate professor of medicine; J. Philip Miller, to associate professor of biostatistics in preventive medicine; Homer E. Nash, Jr., to assistant professor of clinical pediatrics; David W. Orbhal, to assistant professor of clinical medicine; Earn S. Pal, to assistant professor of clinical psychiatry; Curtis A. Parrin, to assistant professor of path-ology; Alan L. Pearlman, to professor of physiology and biophysics; Supote Phiphutanaikul, to assistant professor of clinical otorhinolaryngology; Milenko V. Pale-lich, to associate professor of radiology; Daniel E. Pets, to assistant professor of clinical medicine; William J. Powers, to assistant professor of clinical medicine; Dabaeru C. Rao, to professor of biostatistics in preventive medicine; professor of bio-statistics in psychiatry and professor of biostatistics in geriatrics; Devrimi Y. Ruo, to assistant professor of radiology; Samuel H. Rosen, to assistant professor of clinical psychiatry; Harry D. Rosenbaum, to associate professor of clinical otorhinolaryngology; Jerry L. Rosen-blum, to assistant professor of pediatrics; Samuel E. Schechter, to assistant professor of clinical pediatrics; Daniel F. Schuster, to assistant professor of medicine; Gary D. Shackelford, to associate professor of radiology in pediatrics and professor of pathology; Warren G. Sherman, to associate professor of clinical pediatrics; Reed E. Simpson, to assistant professor of clinical psychiatry; Malcolm M. Slaughter, to research assistant professor of ophthal-mology; Carl H. Smith, to professor of pediatrics and professor of pathology; Richard S. Sohn, to associate professor of clinical neurology; Ross B. Sattin, to associate professor of clinical medicine; Philip D. Stahl, to professor of physiology and biophysics; Paul M. Stein, to assistant professor of radiology; Roger K. Snitzman, to assistant professor of psychiatry; Ronald C. Strickler, to associate professor of radiology; George P. Stricklin, to assistant professor of medicine; Robert C. Wray, Jr., to professor of surgery; Bruce J. Wale, to associate professor of radiology; Todd H. Wasserman, to associate professor of radiology; Gary J. Weil, to assistant professor of medicine; Stuart Weiss, to professor of clinical neurology; Mark R. Willard, to associate professor of radiology; and J. Allen Thiel, to associate professor of pathology; Steven L. Titter, to assistant professor of clinical pediatrics; Reed E. Thompson, to assistant professor of clinical otorhinolaryngology; and William G. Trotty, to assistant professor of radiology; Michele M. Van Eerdewegh, to assistant professor of psychiatry.

**Dance, dance, dance**

The WU Summer Dance Institute, which marks its tenth anniversary this summer as a nationally renowned, intensive dance program with a wide breadth of courses, will be held July 19 to August 7. The program is designed for professional dancers, instructors, therapists and students with a serious interest in dance. Instructors include performers and choreographers Clay Taliaferro (above), Phyllis Lamburt (left) and Don Wagner. The institute, headed by dance division director Annette McRae, draws students from throughout the country and Europe. For enrollment information, call 869-6720 or 889-5858.

**Gallery of Art closed for renovation**

The WU Gallery of Art, Steinberg Hall, is closed for renovation, according to Gerald D. Bolas, director. The date of its reopening has not yet been determined, but it will coincide with the inauguration of a major exhibition.