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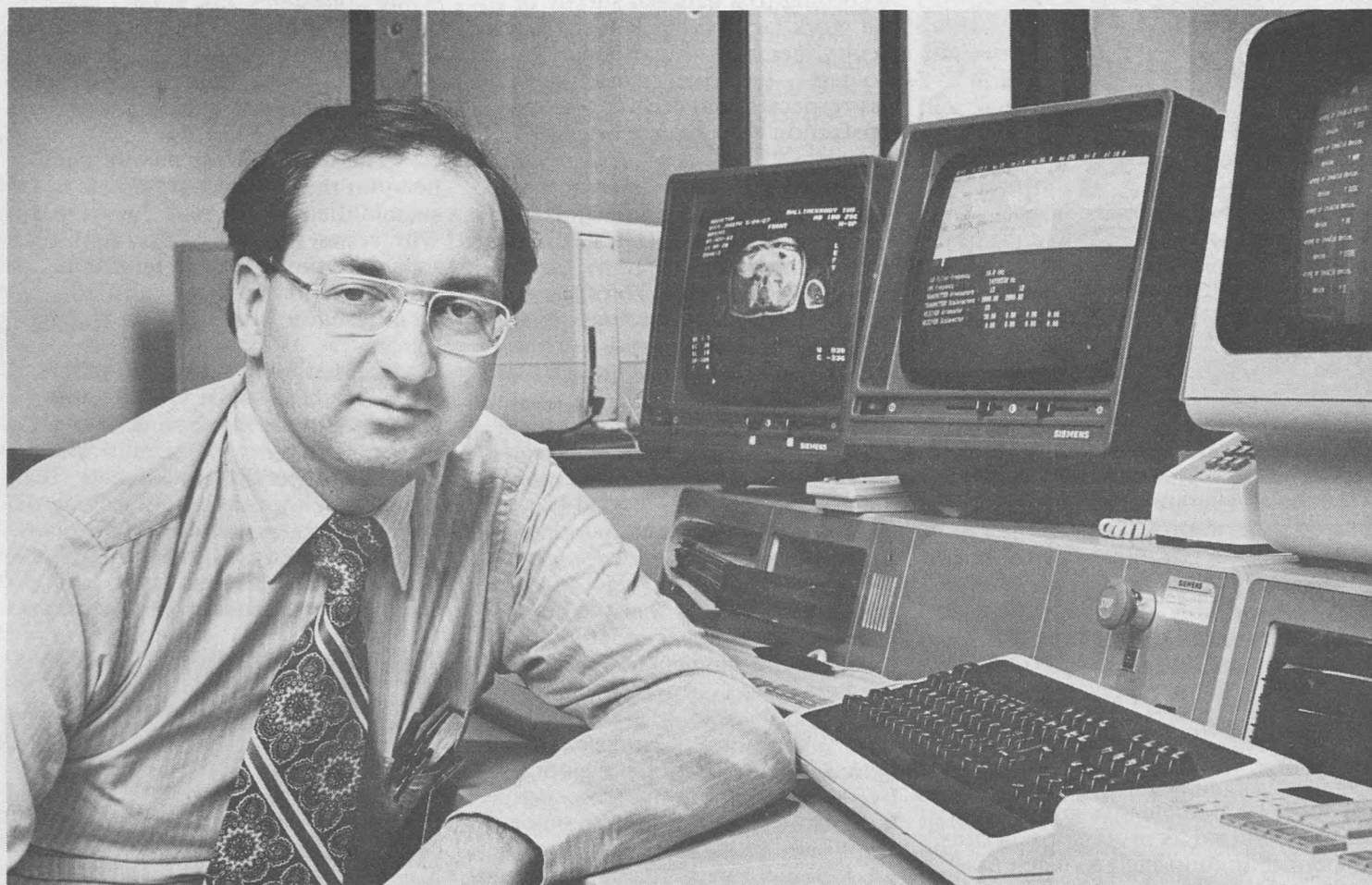
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Washington University RECORD

WASHINGTON
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Vol. 9 No. 15/Dec. 15, 1983



Michael W. Vannier, a radiologist at the Mallinckrodt Institute of Radiology, at an NMR computer.

Tissue mapping

A computer used to take satellite images of Earth now analyses complex medical scans of the human body

The same computer used to create vivid satellite images of Earth is now analyzing complex medical images of the human body. Michael Vannier, a radiologist at the Mallinckrodt Institute of Radiology, has shown that the LANDSAT image-processing computer can recognize specific body tissues and realistically color-code them in cross-sectional photographs of the head, chest and abdomen.

Such computer analysis partially resolves a major problem in the promising new field of body scanning known as NMR, nuclear magnetic resonance.

Although NMR images incorporate vast anatomical and physiological information, their extreme complexity makes interpretation difficult. But when NMR scans were fed into the LANDSAT computer, it analyzed them just as if they were earthly landscapes and reduced a series of multispectral NMR images into a single, realistic color composite.

Vannier and other Mallinckrodt radiologists are collaborating with engineers from NASA's Kennedy Space Center and the University of Florida at Gainesville. The technology transfer project began one year ago.

A former NASA engineer himself, Vannier saw the obvious opportunities for cross-over applications once he realized that NMR images are really quite similar to satellite pictures.

LANDSAT takes photographs in

several segments of the light spectrum — hence the term multispectral. For example, when the satellite takes a picture of Chicago from more than 100 miles out, it actually takes several — green, red and infrared.

The LANDSAT computer program examines all the photos, notes the contrasts, eliminates redundancies, combines them into a composite image, and assigns realistic color to the various components.

Like a satellite, the NMR scanner can produce a multitude of pictures with different spectral characteristics.

"And that's precisely what the problem has been with NMR," Vannier explains. "Everyone is asking, 'How do we interpret this data?' At the same slice level in the human body, we receive multiple pictures that have similarities but different contrasts. In applying satellite technology, we've been able to critically examine these contrasts and exploit them to produce realistic composite images."

To make those images as real as possible, Vannier and other Mallinckrodt radiologists chose colors for the composites very carefully.

"These pictures look like you just lifted a slice right out of the human body," says Vannier.

Vannier and other team members have collaborated on more than 30 patient-studies so far, producing color composites for many of them at

NASA's satellite image computer in Gainesville.

"From analyzing body scans, we've also discovered that many organs and types of tissue have distinct signatures, just as landscape features do," says Vannier. Recognizing those "signatures" enables the computer to separate wheat fields from corn fields, or bone from muscle.

The computer breaks the NMR scan into hundreds of tiny squares and then searches the image square by square for any signature of interest to the radiologist. The capacity lets Vannier create tissue maps of the human body.

The LANDSAT computer also has artificial intelligence which permits it to learn from its successes and failures. The 100th body map it creates should be more precise than the first.

"No one can mentally assimilate NMR images the way this computer can," says Vannier.

He says the tissue maps will help radiologists and other physicians see the precise outline of a particular organ or collection of tissues, and make possible earlier diagnoses in a wide range of disorders.

Vannier provides an example: "By teaching the computer the signature for a blood clot in the brain, we can ask it to show us every part of the image in which that signature can

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Columbia U. adds Jones papers to collection

Columbia University, N.Y., has accepted the papers of Alice Hanson Jones, WU professor emerita of economics, for inclusion in its Rare Book and Manuscript Collections.

Of primary interest to the university is her 1969-76 study of American colonial wealth, which resulted in two books: *American Colonial Wealth: Documents and Methods* (1977) and *Wealth of a Nation to Be: The American Colonies on the Eve of the Revolution* (1980).

Another important set of papers evolved from her 1934-46 work with the U.S. Bureau of Labor Statistics in the Cost of Living Division. First as an economist, then as assistant chief, she supervised nationwide studies of urban workers' family expenditures. The division made these investigations to revise the relative importance of items in the Cost of Living Index, now called the Consumer Price Index.

Jones began independent research in the 1930s on the level of living and wealth in the pre-Revolutionary War northern colonies. She joined the WU faculty in 1963 and resumed the research for her doctorate in economics at the University of Chicago. She received her PhD in 1968, at the age of 63.

With funding from the National Science Foundation and the National Endowment for the Humanities, she expanded her research to include all 13 colonies. Her study is based on 919 probate inventories (the assets left by a person at death) in 22 counties, representing all 13 colonies, in 1774.

Columbia University's Stuart Brucey, Allen Nevins Professor of Early American History, wrote the following comments about Jones' research, in a foreword to *American Colonial Wealth*:

"Only rarely is it possible to say that the work of a single scholar marks the point at which future studies must commence for years to

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Alice Hanson Jones



The staff of the *Washington University Record* wishes everyone a happy and peaceful holiday season. The *Record* will not be published during semester break. Publication will resume Jan. 19, 1984.

Harvard mathematics professor to deliver Roever lectures in geometry

Phillip A. Griffiths, professor of mathematics at Harvard University, will deliver the William H. Roever Lectures in Geometry to be held Jan. 9-13. Griffiths will speak on "Differential Systems and Isometric Imbeddings" during the daily sessions which begin at 4 p.m. in Room 101 Lopata Hall.

The Roever lecture series was established last year as the first named lectures in the Department of Mathematics.

The lecture series is funded by William A. and Frederick H. Roever in memory of their father, who specialized in the study of descriptive geometry. Established last year, it is the first named lecture series in the Department of Mathematics.

William H. Roever graduated from WU in 1897 with a BS in mechanical engineering. He taught astronomy here for two years before studying at Harvard University, where he

earned an MA and a PhD. He returned to WU in 1908 as an assistant professor of mathematics, and in 1932 he became chairman of the Department of Mathematics and Astronomy. He retired as professor emeritus in 1944, but continued to teach until his death in 1951 at age 76.

400 students expected to attend Latin Day

The conquests and personality of Alexander the Great is the theme of the second annual Latin Day at WU, which will attract more than 400 high school Latin students and their instructors.

Latin Day II, which is sponsored by WU's Department of Classics, will be held from 9:30 a.m. to 2 p.m. on Thursday, Jan. 5, in Edison Theatre.

Kevin Herbert, chairman of the classics department, and Cyrus F. St. Clair, a Latin instructor at Parkway West Junior High School, will present illustrated lectures and a feature film on the life of Alexander the Great, starring Richard Burton.

For more information, contact Herbert at 889-5123.

RECORD

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Social work faculty job satisfaction surveyed

According to a national survey of social work faculty, black social work faculty members — particularly women — perceive themselves to be less respected and receive less job satisfaction than their white colleagues.

The black faculty members also believe they have a poorer job future than their white associates, according to the survey conducted by Larry E. Davis, WU associate professor of social work and psychology.

Davis said the purpose of the survey was to examine the qualitative job experiences of faculty in predominantly white schools of social work. The survey was an attempt "to assess how blacks and whites perceive themselves being responded to as faculty members by their students and colleagues," he added.

The "clearest message" the survey data conveys is that the black female faculty member, relative to other faculty members, appears to be the "underdog" in social work education, he said.

"A great deal of comparative research has dealt with the quantitative aspects of employment, such as how many minorities and women faculty are in the field and how they are faring with regards to salary and position," Davis said. "Yet, it is somewhat surprising that social work, a field so often criticized for being 'soft' and perhaps overly concerned with social and emotional issues, has not given more attention to the qualitative aspects of employment."

In conducting the survey, Davis was interested in responses to questions like, "Overall, how are you treated by students, faculty and staff?" and "How satisfied are you with your faculty position?" rather than quantitative responses to questions like "How much are you paid?" and "What degree do you hold?"

The survey questionnaire was sent to 350 black and 350 white faculty members who worked at predominantly white institutions. The questionnaire was returned by 133 blacks (38 percent) and 114 whites (33 percent). The number of male and female respondents was almost evenly divided.

Davis focuses on responses to three survey questions in his report on the survey, titled "Black and White Social Work Faculty: Perceptions of Respect, Satisfaction and Job Permanence." He has been invited to present the paper at the Council on Social Work Education's Annual Program Meeting in Detroit, Mich., in March.

Davis said his findings suggest that the perceived quality of work experiences of social work faculty vary significantly according to race, gender and the possession of tenure.

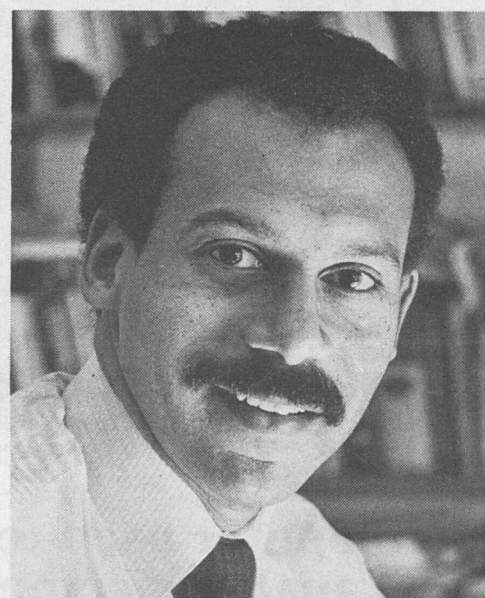
In relation to respect from others, it appears that black faculty members perceive themselves as receiving less respect than their white colleagues. Neither gender nor tenure seems to have any significant effect on the amount of professional respect felt, Davis found.

In relation to job satisfaction, however, it appears that black faculty members are less satisfied than their

white colleagues, but gender plays an important role. The survey found that black women faculty members were significantly less satisfied than their fellow black male faculty members.

The white female faculty members, on the other hand, closely resemble their white male counterparts with respect to satisfaction with their jobs. The possession of tenure improves the job satisfaction of all faculty, white and black, male and female.

In predicting future job permanence of these social work faculty, Davis said both race and gender are important indicators. "Significantly greater numbers of black faculty than white are either definitely leaving or are uncertain as to their future plans. Of those with plans to leave, it is the black female who reported having the highest proportion of any group



Larry E. Davis

with definite plans to leave, and the lowest proportion of any group with plans to remain in their present positions."

Davis cautions that because of the small sample size of the study, the conclusions drawn must be guarded. But he feels the findings suggest that this area of research warrants further exploration.

"It is hoped that the findings of this study will serve to stimulate the enhancement of teaching environments so that these environments resemble less those elements of society we oppose, and more the society we advocate," Davis said.

Jones—continued from p. 1

come. What Alice Hanson has accomplished can be described only in terms of superlatives.

"[Her] work has changed and will continue to change the course of history as we understand it."

Kenneth A. Lohf, librarian for the Rare Books and Manuscripts Collection at Columbia University, wrote that the papers "will complement our already strong holdings in [colonial] economics and thereby strengthen our resources for research."

Jones is immediate past president of the Economic History Association, an international organization. She became professor emerita at WU in July 1977.

LANDSAT—continued from p. 1

be found. Within a couple of seconds, the computer searches the entire image, coloring any area that has the hematoma signature."

In the next few months Vannier will turn his attention to converting the LANDSAT computer program so that it can operate on the computer that is part of the NMR system.

"There is every indication that it should work," he says. "We can't expect everybody to run to a NASA image processing center with their NMR scans. If this technique is to be evaluated in a comprehensive manner, it will have to be converted to a form compatible with NMR computers. Then all NMR centers will have a chance to put it to the test."

Don Clayton

NOTABLES

Tilford Brooks, associate professor and chairperson of the Department of Music, attended the Dearborn Conference on Music in General Studies held in Michigan Nov. 17-22. In chairing four seminar sessions, Brooks presented broad-based analyses of issues related to teaching music to the non-music major. The conference was developed by the College Music Society and the National Association of Schools of Music.

David Katz, associate professor and director of the Video Center in the School of Social Work, was project director of a two-part series for arthritis patients which aired on cable television in the St. Louis County area in early December. The series, titled "Winning Over Arthritis Pain, Let Me Show You How," is a production of The Arthritis Foundation, the Multipurpose Arthritis Center at the WU School of Medicine and the Video Center. The project is a pilot study which will be evaluated to assess the usefulness of community access cable television as a resource in fostering positive health behavior among the audience.

Gertrude L. Knelleken, associate professor of physical education, recently served on the North Central Association's (NCA) visiting committee to Webster Groves High School. Knelleken was chairperson of the committee that evaluated Webster Groves' physical education program. The NCA is a nationwide association that accredits high schools and makes recommendations to their faculty and staff.

Edward L. MacCordy, associate vice chancellor for research, was elected president of the National Council of University Research Administrators (NCURA) in November at the council's 25th annual meeting in Washington, D.C. MacCordy was vice president of the NCURA in 1983. The NCURA has a membership of 1,500 research administrators from across the country and is headquartered in Washington, D.C.

Mohamed A. Marzouk, professor and chair of the Department of Operative Dentistry, was a speaker at the Eighth World Congress of the Mexican National College of Dentists held in Acapulco in November. Marzouk spoke on "Recent Modern Designs of Tooth Preparations for Composite Resins." **William S. Brandhorst**, associate professor of orthodontics, also attended the meeting and delivered a speech on "Observations in Orthodontic Treatment."

Alexander N. Nakeff, associate professor of cancer biology in radiology and director of the Flow Cytometry Laboratory at the Mallinckrodt Institute of Radiology, is the recipient of a \$271,000 grant awarded by the U.S. National Institutes of Health (NIH) (Hematology Study Section) National Heart, Lung, and Blood Institute. The three-year research grant for the study of the cell physiology and development of bone marrow megakaryocytes supports fundamental studies of the role played by megakaryocytes in the process of blood coagulation through their production of blood platelets.

Marc D. Smith, assistant professor of health care administration, presented a paper, titled "An Interactional Model of the Quality of Maintenance Therapy for End-Stage Renal Disease," to the Council of Nephrology Social Workers at the 33rd annual meeting of the National Kidney Foundation in Washington, D.C., Dec. 1-4. Smith also moderated a panel on "Research in Social Work Practice: Strategies for the Assessment of ESRD Patients and Programs" at the meetings.

Kim Strommen, associate dean of the School of Fine Arts, will exhibit his woven sculpture from Jan. 21 through Feb. 26 at the Timothy Burns Gallery, 393 N. Euclid Ave., second floor. Strommen binds strips of canvas on poles and into ropes to form free-standing sculptural forms, forcing the traditional painted canvas out from the wall and eventually to the floor. Two examples are on exhibit through Jan. 29 in the Faculty Show, Gallery of Art, Steinberg Hall. A preview reception for Strommen's show will be from 3 to 6 p.m. Sunday, Jan. 22.

Sarantis Symeonoglou, associate professor of art and archaeology, lectured on "A New Perspective on the Sculptures of the Temple of Zeus at Olympia" at the 12th International Congress of Classical Archaeology, Sept. 5-11, in Athens, Greece. Symeonoglou also presented a paper in late September on "The Founding of Thebes." He spoke at a seminar, titled "City Structures, Urbanism and Literature in Greece and Rome," organized by the Department of Classics at Princeton University.

Have you done something noteworthy?

Have you: Presented a paper? Won an award? Been named to a committee or elected an officer of a professional organization? The *Washington University Record* will help spread the good news. Contributions regarding faculty and staff scholarly or professional activities are gladly accepted and encouraged. Send a brief note with your name, position, department and activity to Notables, Campus Box 1142. Please include a phone number where you can be reached.

Local executives on loan through consortium

Maria Florez and William Simmermacher are serving as "Executives on Loan" to the Consortium for Graduate Study in Management during the current academic year.

Florez, who has been employed by IBM for the past seven years as a systems engineer, will be drawing up a marketing/student recording plan to increase the number of qualified minority candidates applying to the MBA program.

Simmermacher, who has been with IBM for over 35 years (the last seven as corporate resident manager), will work to increase the base of corporate and foundation financial support for the consortium.

The consortium is a non-profit organization comprised of seven universities whose goal is to educate talented minority men and women for corporate management positions.

Olin Library display explores Martin Luther's impact on the arts

In celebration of the anniversary of Martin Luther's 500th birthday, an exhibit has been assembled in the main display area on the third level of Olin Library.

The exhibit, titled "Martin Luther and the Arts," focuses on the aesthetic and intellectual impact the German reformer created in the cultural world.

"We wanted to make the exhibit neither religious nor historical," said Kenneth L. Nabors, humanities librarian at Olin. "We took an interdisciplinary approach that we hope will have appeal for a greater number of people."

Nabors coordinated the exhibit with the help and resources of the University's music and art libraries. The display, on view through mid-January, includes items such as a 1726 edition of the Luther Bible, with decorative slipcase; a reprint of the first Luther hymnal (1524), titled *Achtliederbuch* (Eight Songs Book); a recording of Mendelssohn's "Reformation" symphony; and assorted volumes which portray Luther in poetry, music and drama.

A concise profile of Luther provides an introduction to the exhibit, explaining that while the Reformation generated the destruction of hundreds of monuments (in an attempt to annihilate idolatry), it also elicited the creation of new art objects: book illustrations, altarpieces, panel paintings and epitaph memorials. Some examples of these art forms are showcased in the Olin exhibit.

A singer, lutenist and composer, Luther greatly contributed to the musical foundation of the church service as well. "Music is the best gift of God," he wrote. "Oftentimes it inspired and stirred me so that I again

found pleasure in preaching."

In his attempt to return to the roots of Christianity, Luther initiated a flowering of the arts, a slice of which is represented in Olin Library.

The exhibit can be viewed during regular library hours. For more information, call the reference desk at 889-5410.



Martin Luther is the topic of an exhibit at Olin Library to celebrate the anniversary of his 500th birthday.

Orwell's '1984' is topic of lecture series

1984, the book by George Orwell which introduced such terms as "Big Brother" and "newspeak," will be explored in a series of free Saturday Seminars beginning Jan. 21 at WU.

The Saturday Seminars, a series of lectures by WU College of Arts and Sciences faculty, are sponsored

by the Master of Liberal Arts Program and University College. They will be held from 11 a.m. to 12:30 p.m. on specified Saturdays in the Ann Whitney Olin Women's Building Lounge on campus.

The seminar topics are: Jan. 21 — "George Orwell's England" with Richard Davis, professor of history; Feb. 4 — "Orwell and the Politics of Collectivism," Robert Williams, professor of history and dean of University College; Feb. 18 — "Orwell and Language," Burton Wheeler, professor of English; March 3 — "Orwell, Personality, and Social Control," Lee Robins, professor of sociology in psychiatry; and March 24 — a roundtable discussion moderated by Williams.

Orwell wrote *1984* in 1948 and originally intended to call the book "The Last Man in Europe." Like his earlier book, *Animal Farm*, *1984* was based on Orwell's experiences with communists in Spain in the late 1930s. Both books contain warnings about the danger of totalitarian states.

The series is open to the public; no registration is required. For more information, call 889-6788.



Robert C. Williams

CALENDAR

Dec. 15-Jan. 21

Saturday, Dec. 17

10 a.m.-4 p.m. School of Fine Arts Ceramics Sale. Bixby Gallery.

Sunday, Dec. 18

6 p.m. Interdenominational Vesper Service with Paul MacVittie, dir., WU Protestant Center. Graham Chapel.

Saturday, Jan. 14

9 a.m. Personal Computing Education Center Short Course, "Using Interactive Computing with MUSIC — Faculty and Student Orientation." Free to WU community. (Also Sat., Jan. 21, noon to 3 p.m.) For registration and class location, call 889-5330.

Tuesday, Jan. 17

10 a.m. Personal Computing Education Center Short Course, "Introduction to Computing Facilities." Free to WU community. For registration and class location, call 889-5330.

Friday, Jan. 20

7:30 p.m. Inter-Varsity Christian Fellowship Meeting. Green Stuffs Line, Wohl Center.

LECTURES

Thursday, Dec. 15

4 p.m. Central Institute for the Deaf Research Seminar, "The Structure of Deaf Children's Gestures," Susan Goldwin-Meadow, Dept. of Ed., U. of Chicago. CID Aud., 2nd fl., clinics & research bldg., 909 S. Taylor Ave.

4 p.m. Department of Chemistry Seminar, "Applications of Solid State NMR to the Study of Surfaces," Gary Maciel, prof. of chem., Colorado State U. 311 McMillen.

Friday, Dec. 16

Noon. Central Institute for the Deaf Research Seminar, "Linguistic Experience and Memory for Sign Language," Rachel Mayberry, Dept. of Ed., U. of Chicago. CID Aud., 2nd fl., clinics & research bldg., 909 S. Taylor Ave.

Noon. Neural Sciences Seminar Series, "Platelet Derived Growth Factor: Structure and Function in Normal and Virus Transformed Cells," Thomas Deuel, WU prof. of medicine. Room 472 McDonnell Sciences Bldg., 4565 McKinley.

2 p.m. McDonnell Lab. for Psychical Research Seminar, "Coincidence and Explanation," Galen Pletcher, Philosophy Dept., SIU-Edwardsville, Ill. 117 Eads.

Monday, Dec. 19

4 p.m. Department of Chemistry Seminar, "The Compound Nucleus Decay Via the Emission of Large Fragments," Lee G. Sobotka, Lawrence-Berkeley Labs., Berkeley, Calif. 311 McMillen.

Tuesday, Dec. 20

Noon. Psychiatry Neuroscience Series, "Immunohistochemical Localization of Myelin Proteins During Myelination," Brent Clark, WU asst. prof. of pathology. Schwarz Aud., 1st fl., main corridor, Barnes Hosp.

Thursday, Jan. 5

9:30 a.m. Latin Day for area high school students. Speakers include: Kevin Herbert, chairman, WU classics dept., and Cyrus F. St. Clair, Parkway West Junior High School. Edison Theatre.

Friday, Jan. 6

6 and 8:30 p.m. WU Association Travel Lecture Series, "China," Raphael Green, filmmaker. Graham Chapel. For ticket info., call 889-5122.

Monday, Jan. 9

4 p.m. Department of Mathematics William H. Roever Lectures in Geometry, "Differential Systems and Isometric Imbeddings," Phillip A. Griffiths, prof. of mathematics, Harvard. 101 Lopata. (Also Jan. 10, 11, 12 and 13, same time, Lopata.)

Tuesday, Jan. 10

2:30 p.m. Center for the Study of Data Processing Symposium Series, "Perspectives on the User Interface," Ken Villard, Villard Renerts. 30 January Hall.

Thursday, Jan. 19

4 p.m. Department of Earth and Planetary Sciences Seminar, "Basaltic Meteorites and Their Apparent Planets," Harry Y. McSween, asst. prof. of geological sciences, U. of Tenn. at Knoxville. 102 Wilson.

8 p.m. Department of History Lecture, "Mythical Mexico," Carlos Fuentes, WU Visiting Professor in Literature and History, Steinberg Aud.

Saturday, Jan. 21

11 a.m. Saturday Seminar Series, "George Orwell's England," Richard Davis, WU prof. of history. Sponsored by the Master of Liberal Arts Program and University College. Ann Whitney Olin Women's Bldg. Lounge.

EXHIBITIONS

"American Indian Art." Through Jan. 8. Gallery of Art, print gallery. 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends.

"Cubists and Surrealists." Through Jan. 8. Gallery of Art, lower west gallery. 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends.

"Martin Luther and the Arts." Through Jan. 10. Olin Library, third level. Open regular library hours.

"Faculty Show." Through Jan. 29. Gallery of Art, upper gallery. 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends.

"The Tradition of Excellence: Contemporary Fine Printing From Private Presses." Through Dec. 30. Special Collections, Olin Library, 5th level. Open weekdays 8:30 a.m.-5 p.m.

"Life and Land in 19th-Century Europe." Through April 22. Gallery of Art, lower gallery. 10 a.m.-5 p.m. weekdays; 1-5 p.m. weekends.

"The Sculpture of Baroness Yrsa Von Leistner." Jan. 15 to Feb. 5. Bixby Gallery. 10 a.m.-4 p.m. weekdays; 1-5 p.m. weekends.

FILMS

Friday, Dec. 16

7 and 9:30 p.m. WU Filmboard Series, "The Paper Chase." \$2. Brown Hall Aud. (Also Sat., Dec. 17, same times, Brown.)

Friday, Jan. 20

7 p.m. WU Filmboard Series, "Gone With the Wind." \$2. Brown Hall Aud. (Also Sat., Jan. 21, and Sun., Jan. 22, same time, Brown.)

SPORTS

Thursday, Jan. 19

10:30 p.m. Hockey, WU Hockey Club vs. St. Louis U. Afton Rink.

Saturday, Jan. 21

5:30 p.m. Women's Basketball, WU vs. Rockhurst College. Francis Gym.

7:30 p.m. Men's Basketball, WU vs. UMSL. Francis Gym.

Calendar Deadline

The deadline to submit items for the Jan. 26-Feb. 4 calendar of the *Washington University Record* is Jan. 12. 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's name and identification and the title of the event; also include your name and telephone number. Address items to King McElroy, calendar editor, Box 1142.



A spear-bearing warrior from the terra-cotta army of Emperor Ch'in Shin Huang Ti, buried almost 22 centuries ago, in Sian, China, is one of many curiosities to be shown in Raphael Green's travelogue, titled "China." The film will be shown in Graham Chapel at 6 and 8:30 p.m. on Jan. 6 and is sponsored by the WU Association.

Freshmen win Air Force ROTC scholarships

Eleven WU freshmen recently won Air Force ROTC scholarships with each one valued at about \$40,000.

Winners of the four-year scholarships are: Thomas Benton, Sherwood, Ark.; Jill R. Firse, Belleville, Ill.; Joseph M. Goodwin, Oklahoma City, Okla.; Angela K. Hogan, Benbrook, Texas; John G. Hosterman, Tulsa, Okla.; Thomas K. Lattig, Austin, Texas; Brian K. Peaslee, Fairfield, Iowa; David A. Rosenzweig, Chapel Hill, N.C.; Frank W. Simcox IV, Belleville, Ill.; Steven F. Wrobel, Pasadena, Md.; and Ward A. Walker, Belleville, Ill.

Resident advisors needed for South-40 dorms

Applications for the 1984-85 resident advisor staff are now available at the Residential Life Center, the Cage in Wohl Center, and the Resource Desk in Mallinckrodt Center. Individuals who enjoy working with people and have a sense of commitment, as well as warmth and leadership potential, are encouraged to apply.

Completed applications and all supporting materials are due by Jan. 20, 1984, in the Residential Life Center.

Belleville, Ill.

As Air Force ROTC cadets, the 11 winners attend classes offered at the University by AFROTC Detachment 207, located at Parks College.

After obtaining their college degrees, the scholarship recipients will be commissioned second lieutenants in the U.S. Air Force and will serve four years of active duty.

Student pottery to be sold in Bixby Gallery

Several hundred pieces of pottery, glass and other art objects will be on sale from 9 a.m. to 4 p.m. Saturday, Dec. 17, in Bixby Hall's gallery. The pieces were made and will be sold by students in the School of Fine Arts.

David Hershey, associate professor of art and faculty coordinator for the show, said the sale has become a popular annual event. "Several people are very regular in attendance year after year," he said. "We usually have people waiting at the door for us to open."

He said prices were "reasonable," ranging from a couple of dollars to \$40 or \$50 — depending on the object. Profits are shared between the school and the student participants.

For more information, call 889-6500.