7-7-1983

Washington University Record, July 7, 1983

Follow this and additional works at: http://digitalcommons.wustl.edu/record

Recommended Citation


This Article is brought to you for free and open access by the Washington University Publications at Digital Commons@Becker. It has been accepted for inclusion in Washington University Record by an authorized administrator of Digital Commons@Becker. For more information, please contact engeszer@wustl.edu.
The cost of the building is $1.5 million, and occupancy is scheduled for late summer, 1984. The building will contain kitchen, dining and living areas, along with 80 student rooms.

WU plans to construct a four-story building which will house 80 students adjacent to both the new sports complex and the present fraternity house. The estimated cost of the building is $1.5 million, and occupancy is scheduled for late summer, 1984. The building will contain kitchen, dining and living areas, along with 80 student rooms.

Asso-
Cancer research heating up at School of Medicine

The fight against cancer is heating up, especially in the division of radiation oncology at WU's School of Medicine. Researchers there are using a new heat treatment called hyperthermia, which in 1978 — when Perez was a radiation therapist — caused some degree of tumor regression in approximately 80 percent of the patients treated.

In several of those cases, the tumor treated actually disappeared and, at last check, had not returned. The same successes came in a patient population in which other forms of therapy — such as chemotherapy or radiation therapy — had proved ineffective.

"These tumors were of many different types and sizes and all were relatively close to the surface of the skin," says Carlos Perez, director of WU's division of radiation oncology. "We are advanced now to the point that the combination of heat and radiation therapy can be used with optimism in the treatment of breast cancer, cancer of the head and neck, and skin cancer. In some cases it can be used in tumors that have spread to the lymph nodes.

The goal of hyperthermia, according to Perez and his two colleagues, Bahman Emami, assistant professor of radiology, and Gilbert Nussbaum, assistant professor of radiation physics, is to elevate the temperature of the tumor to 110-114 degrees, while keeping the patient's overall "fever" below 104 degrees. Temperatures of about 110 degrees take a high toll on cancer cells.

"We have found," says Perez, "that tumors that were previously irradiated are more susceptible to heat than normal tissues. Heat and radiation work very well together.

By applying heat to tumors, the researchers found they could destroy the life-giving capillaries that surround the tumors. "Tumors are a continual threat to survival," says Nussbaum. He explained that a tumor grows its own network of capillaries, which supply it with oxygen and nutrients from the bloodstream. The capillaries typically service only the cells close to the surface of the tumor, leaving the interior cells in a weakened state.

"Consider the capillaries as a life-line to the tumor," says Emami. "Using a noninvasive technique we developed, we measured in-vivo and in-vitro the density and nutritive status of the capillaries before and after heating. We found that for the levels of heating employed in clinical hyperthermia, circulation after heating was substantially and permanently reduced — an indication that the capillary lifetime was seriously damaged.

It's like destroying the railroad tracks that move cargo in and out of the tumor."

In 1978, Perez used sound waves and microwaves as a source of heat, using equipment borrowed from the physical therapy department. When Nussbaum, a former atomic physicist, joined Perez in 1980 he used his physics background to compare various commercial devices designed to generate heat. Several were adapted for special use in hyperthermia therapy. "Some of the equipments we essentially built from the ground up," Nussbaum says.

The science of hyperthermia is still inexact because it is hard to predict how ultrasound or microwave will travel through the human body. "Even if we put the heat right where we want it, we've got to know where it's going to go from there," says Emami. "Just as in radiation therapy, the effects of heat therapy will depend on how well we can avoid damage to healthy tissues. It's difficult to do because the body has systems developed to help avoid thermal damage by spreading applied heat throughout the body.

Despite its technical drawbacks, the method developed by Nussbaum, Emami and Perez resulted in 1982 in an impressive average success rate of 80 percent for specific types of cancer ranging from 60 to 100 percent in relatively small samples.

But so far the success rates have been demonstrated only on tumors close to the surface of the skin. Those buried deep within the body present difficulties more complicated than tumors near the skin.

"In the end," says Emami, "it's going to come down to whether or not we can fool Mother Nature and successfully circumvent the systems of temperature regulation that thousands of years of evolution have built into the human body."

Law school appoints new assistant dean

Susan Sullivan, former director of career planning and placement at the Georgetown University Law Center in Washington, D.C., has been appointed assistant dean of the WU School of Law.

Her primary responsibilities here will be in career counseling and job placement.

Sullivan joined the Georgetown staff, one of the largest placement centers at any law school in the country, in 1974 as associate director and served as director from 1977 to 1979. While at Georgetown, Sullivan initiated a career development program for first-year law students, the first such program at any American law school. She also was assistant director of admissions at Stephens College in 1979-80.

Sullivan received a doctoral degree this May in higher education administration and counseling from the University of Missouri-Columbia. While in graduate school, she served internships in the office of the provost at the University of Missouri-Columbia, the Missouri Department of Higher Education, Jefferson City, and the Association of American Law Schools in Washington, D.C. She also holds a master in education degree from the University of Miami and a bachelors of arts degree from Drake University.

School of Medicine

(As of May 18, 1983)

Elliot E. Abbey, to assist professor of clinical surgery; Frederick H. Abrath, to assist professor of radiation physics in radiology; Ahmad B. Arde- winek, to associate professor of radiology; Wayne M. Barnes, to associate professor of biological chemistry; John M. Bed- winek, to associate professor of radiology; Dennis M. Bier, to professor of pe- diatrics and associate professor of medi- cine.

Benjamin A. Borowsky, to assist professor of clinical medicine; Richard J. Bower, to associate professor of surgery (pediatric surgery); Stuart B. Boxerman, to associate professor of health care ad- ministration; Vivian L. Braciale, to re- search assistant professor of pathology; Leslie M. Brandwin, to assistant professor of clinical medicine; Laurence Y. Creung, to professor of surgery (general surgery); Phillip C. Darrow, to associate professor of clinical medicine; Randolph C. Gard, to associate professor of clinical medicine; Benedict M. Daxer, to associate professor of clinical med- icine; Douglas F. Covey, to associate professor of pharmacology; Duane E. Cozart, to associate professor of clinical medicine; Felipe Crtini, to assistant professor of clinical psychia- try; Alejandro M. Danuin, to assistant professor of clinical psychiatry; Joseph M. Deh, to associate professor of clinic- al neurology; Steven Dresler, to assist- ant professor of pathology; Felton J. Early, to professor of psycho- therapy (child psychiatry) and of pediatri- cs; Russell E. Eggebrecht, to assistant professor of clinical medicine; Bahman Emami, to associate professor of radiolo- gy; Keith A.A. Fox, to assistant profes- sor of clinical medicine; Martin H. Friche, to assistant professor of medicine; Arthur H. Gale, to associate professor of clinical medicine; Lawrence A. Geis, to assistant professor of ophthalmology; William T. Garrison, to assistant professor of medi- cal education in psychiatry (child psy- chiatry); Lawrence D. Gelb, to associate prof- essor of microbiology and immunology; Arnold M. Goldman, to assistant profes- sor of clinical medicine; Mae E. Gordon, continued on p. 6.

North — continued from p. 3

Research Council, and the Rockefeller Foundation.

The Luce chair is funded by a grant from the Henry Luce Foundation, which the University was awarded in 1981. North's appointment was recommended by the inter-school search committee, headed by Dean E. Hodge O'Neal of the School of Law.

North will teach two undergraduate courses each year. Geis will continue his connection with the multidisciplinary undergraduate program in Law and Liberty currently di- rected by Derek M. Hinte, associate pro- fessor of history.
Chicago landmark restored

Sculpture conservation experts at WU are finishing up a two-month restoration project in Chicago on Ivan Mestrovic's Two American Indians. These heroic bronze figures on horseback, located at the entrance to Grant Park, have been a landmark in downtown Chicago since their installation in 1928. Structural and surface repairs are being performed by the Washington University Technology Associates (WUTA) Sculpture Conservation Laboratory. The project is being financed by the F. B. Ferguson Fund (which commissioned the sculptures 57 years ago) under the administration of the Art Institute of Chicago.

The restoration, appropriately enough, is being done on the centennial of the birth of Mestrovic, a native of Slovenia, now Yugoslavia. He and his family came to the United States in 1947 at the invitation of Syracuse University, and in 1955, he joined the faculty of the University of Notre Dame. He died in 1962.

Engineers and scientists from WUTA, under the direction of Jerry S. Dahl, manager of engineering projects, and Phoebe Dent Weil, conservator, completed an extensive preliminary examination in February and March, and are now working on the final phase — the removal of surface corrosion products and the restoration of the monuments' original color. The last step will include the application of weatherproofing and corrosion prevention coatings.

During the repair process, the legs of the two horses were removed in order to insert a new stainless steel support structure for the sculptures. Concrete filling, which had caused the bronze to crack as it expanded and contracted throughout the seasons, also was replaced with a light epoxy foam.

According to Timothy Lemon, conservator of the Department of Paintings and Objects Conservations at the Art Institute of Chicago, "Few conservation teams exist that tiring together the engineering, scientific, logistical, and managerial skills needed to treat monumental sculpture problems. WUTA staff members have proven ability in such undertakings."
Sunday, July 10
8 p.m. The Gowney Festival Orchestra, conducted by William Schatzkamer, WU prof of music, will perform in the WU quadrangle. In case of rain, the concert will be held in Graham Chapel. (The orchestra also will perform July 17, 21 and 31, 8 p.m. in the quadrangle. Free.)

Monday, July 11
7 p.m. Department of Music Graduate Recital, with Donna Cox, WU graduate student in choral conducting. Graham Chapel.

Friday, July 29
7:30 p.m. The honorees Pipe Band's Third Annual Quadrangle Concert, including traditional Scottish airs, marches, jigs and highland dancing. WU quadrangle. Free.

WU Record award one of seven won by Public Relations Office

The Washington University Record has won an Exceptional Achievements Award for Internal Periodical Publishing in the 1983 Council for Advancement and Support of Education (CASE) Recognition Program. The award is one of seven won by the Public Relations Office, including the broadcast service, feature service and publications office.

Each spring, CASE sponsors a program for its 2,500 member institutions recognizing superior public relations programs and publications. CASE is the largest association of higher and independent educational institutions in the United States.

The award-winning Record issues were edited by Charlotte Boman and written by Jill Draper, Susan Killenberg, Susan Kesling and King McElroy.

In addition, the University's broadcast service, which produces two-minute news feature video stories for television and radio, won an Exceptional Achievement Award for Video and a Citation Award for Radio. The broadcast service is directed by Steve Kraushaar.

The WU Record is published by the feature service and publications office, including the broadcast service, feature service and publications office.

SIR program sponsors scholars from abroad

WU departments and schools may submit a proposal to invite a scholar to come to WU for a research visit as part of the SIR program. The SIR program is open to departments and schools which have not had frequent opportunities to receive scholars from abroad as lecturers and are introducing programs with an international perspective, and those which have an established international or area studies program.

For more information on the Scholars-In-Residence program, contact the Council for International Exchange of Scholars, 11 Dupont Circle, Suite 100, Washington, D.C. 20036, telephone (202) 833-4956.

Calendar Deadline

The deadline for submitting items for the Aug. 4-Sep. 3 calendar of the WU Record is July 22. Items must be typed and must state, date, place, nature of event, sponsor and admission cost. Incomplete items will not be printed. If available, please include speaker name and identification and the title of the event. These scheduling items, please include your name and telephone number. Address items to King McElroy, calendar editor. Box 1142.