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Thurtene Carnival continues a near-century of tradition

Step right up, ladies and gentlemen, boys and girls! For a mere 10 cents — just one thin dime — you, too, can bear witness to the Grand Gigantic Galaxy of Gorgeous Glittering Generalities. That’s right, behold aerial acrobats, mystifying magicians and tenacious tightrope walkers. And gaze and gape and gawk, if you dare, at Walsoussas, The Three-legged Wonder...

So went the banner 90 years ago as the first “Youunnivee Surrack” was staged May 9, 1907, at Francis Field. The proverbial grandfather to the modern-day Carnival, the Youunnivee Surrack was conceived by Pralma, Washington University’s then-senior-men’s honorary. The seven-hour festival was run much like a real circus and featured side shows and a main attraction. General admission was 10 cents, side shows were a nickel, and the proceeds were donated to the Athletic Association. Dual performances of the main show were highlighted by a tightrope act and a quartet that sang “Won’t You Fondle Me?” backwards. The side shows — which included Walsoussas, The Three-legged Wonder — made outrageous claims of dubious sincerity. Walsoussas, alas, turned out to be a three-legged chair chained to a post. A crowd of 400 made the event a roaring success.

Nearly a century later, the Thurtene Carnival does bear some familial resemblance to its entertaining ancestor. Charity, contrivacy and good clean fun still are the driving forces. But Walsoussas has given way to Ferris wheels. The flapping “Big Top” has been replaced by sturdily constructed facades. And the crowd of 400 has swelled to a two-day throng of about 80,000.

Continued on page 6

In this issue...
Elderly challenges
Older adults burn less fat during exercise, making it harder for them to lose extra pounds
Lifeavers
Saving lives in the trauma room is just another day at the office for Timothy G. Buchman, M.D., Ph.D.
Science education
Nobel Prize-winning physicist Leon Lederman will deliver this year’s Feenberg Memorial Lecture

Professor emeritus Kurt Hohenemser finds answers in the wind

On those rare dry Missouri days with gusts up to 30 mph, Kurt H. Hohenemser is gone with the wind. Hohenemser, Dr. Ing., professor emeritus of aerospace engineering, scours into his car and drives Interstate 44 some 16 miles from his home to gather wind turbine data at Washington University’s Tyson Research Center. A trail through Tyson’s oak-hickory-cedar forest leads to a 60-foot-tall tower that holds a 25-foot-diameter wind turbine Hohenemser designed about two decades ago. The turbine’s rotor, patterned after that of a helicopter, needs testing in its various configurations in gusts up to 30 mph. This is a condition — in the absence of thunderstorms or snowstorms — that occurs at Tyson only a few times a year.

At such turbulent times, Hohenemser receives a research windfall. “The best times are spring and fall,” he said. “In summer, high winds occur only in thunderstorms. Moisture and humidity disrupt the electronics.”

Various electronic devices attached to the wind turbine relay data to a nearby shed. There, Hohenemser videotapes the data — represented by motions of seven different light points generated in an obsolete oscillograph for which Eastman Kodak Co. stopped producing light-sensitive paper years ago. In a long videotape, Hohenemser is happy to find a few minutes of suitable data that will take him hours to analyze.

Hohenemser, who became professor emeritus in 1975, gathers electric energy while the wind blows. He is seeking proof that a properly designed helicopter-type rotor with its helicopter-type controls is more suitable for wind turbines than commonly used propeller-type rotors. Even in areas with high average wind speeds, wind power plants are not yet a clear economic alternative to fossil fuel or nuclear power plants. Thus, improvements in wind turbine designs are important.

An aviation analyst There are several remarkable aspects of Hohenemser’s research. The first: He is 91 years old and has been gathering data at the Tyson site since 1980.

While the term “pioneering” often is used loosely to describe researchers, that is not the case with Hohenemser. He began designing and testing helicopters with the Flettner Aircraft Co. in Berlin in 1935 when the concept was being explored by the famous German inventor Anton Flettner. And the only competition he came from another famous German helicopter developer, H. Focke.

When I began work on helicopters, Flettner had developed some ideas about possible helicopter types, but the actual product didn’t even exist,” Hohenemser said. “He was ingenious as an inventor, but he was not an analyst. I did the analysis for his inventions. I told him which ones worked and which ones didn’t.”

The association with Flettner lasted a dozen years and happened in a roundabout way, owing to a different turbulence — the turmoil of Germany with the rise of Adolf Hitler. Hohenemser received his doctorate in engineering in 1935 from the Insti-...
Older adults burn less fat during exercise

Many automobiles don't come with spare tires anymore, but many of us already have them. We couch potatoes often loo in front of the television instead of taking our extra pounds for a jog around the block. But new research shows that inactivity is not the reason why many old folks burn less fat than younger people when the two groups do similar intensity — the same absolute exercise intensity — the same exact workload — and the same relative intensity. As a consequence, carbohydrate oxidation was 35 percent higher. "Carbohydrate and fat are the two major fuels used during exercise — glucose from carbohydrate and fatty acids from fat," Klein said. "If you use less fat as a fuel, you automatically use more carbohydrate. So it makes sense that if elderly muscles have difficulty converting fat into energy, they have to use more carbohydrate to compensate."

In the young adults, about one-half of the fuel metabolized during exercise came from fat, with the other half from carbohydrate. In the elderly subjects, about two-thirds came from carbohydrate and only about one-third from fat.

Klein said burning carbohydrate rather than fat is not unhealthy. It simply substitutes one fuel source for another. But increased use of carbohydrate makes it harder for people to continue their workout. Carbohydrate oxidation leads to quicker fatigue and depletes blood sugar — a sense that if elderly muscles have difficulty oxidizing fat from the bloodstream, they can oxidize fat as a fuel directly during exercise. "If older people train rigorously for about four months, they have more normal patterns of fat oxidation," Klein said. "It comes back to where it is in younger adults. Apparently, training either corrects the defect or compensates for it in some way."

Normal muscles use two sources of fat. There is the fat our bodies store in adipose (fat) tissue. It is broken down and released into the bloodstream, which delivers it to muscles. The second source of fat comes from muscles themselves. Muscle tissue contains its own triglyceride droplets, so it can oxidize fat as a fuel directly during exercise. This study did not determine whether aging muscles have more trouble oxidizing fat from the bloodstream than fat stored in muscle or vice versa, but Klein now is starting to evaluate the role of intramuscular triglycerides and plasma fatty acids during exercise in elderly subjects.

"The older people had a decreased ability to oxidize fat during exercise, both at the same absolute exercise intensity — the same exact workload — and at the same relative intensity, which is a lower workload because older people tend to be less fit than younger people," Klein said.

Substituting fuels
Average fat oxidation was 25 to 30 percent lower in the older people than in the younger people at both the same absolute and the same relative intensity. As a consequence, carbohydrate oxidation was 35 percent higher. "Carbohydrate and fat are the two major fuels used during exercise — glucose from carbohydrate and fatty acids from fat," Klein said. "If you use less fat as a fuel, you automatically use more carbohydrate. So it makes sense that if elderly muscles have difficulty converting fat into energy, they have to use more carbohydrate to compensate."

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Klein said burning carbohydrate rather than fat is not unhealthy. It simply substitutes one fuel source for another. But increased use of carbohydrate makes it harder for people to continue their workout. Carbohydrate oxidation leads to quicker fatigue and depletes blood sugar levels more readily, he said. As a result, sedentary elderly people cannot exercise for as long as sedentary young people.

The physiologic reasons that elderly people burn less fat are not known. Klein's team did not find any defect in the ability to mobilize body fat. There was little resistance of body fat to catecholamines, the hormones used to mobilize fat tissue for conversion to energy, and fat breakdown produced plenty of fatty acids for muscle to oxidize.

Klein believes the answer lies in the muscles themselves. "It appears the muscle tissue of older people is not able to — or prefers not to — oxidize fat as a fuel," he said. Changes that occur in aging muscle might help explain why our muscles no longer oxidize fat as they did when we were younger. Muscle cells lose some of their mitochondria, the cellular structures that produce energy. Loss of mitochondria might contribute to a loss in the ability to oxidize fat.

The good news
But even before the precise mechanisms are understood, there's good news for elderly people. The paper mentions that an intensive 16-week exercise program helped the elderly subjects oxidize fat more like younger participants. "If older people train rigorously for about four months, they have more normal patterns of fat oxidation," Klein said. "It comes back to where it is in younger adults. Apparently, training either corrects the defect or compensates for it in some way."

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"Dowton's Kids"
In the Class of 1999 Show on April 6, second-year students, from left, Jan Smith, Maureen Farrell, Tim Root, Julie DeLisle and Nancy Wood, performed a skit imitating School of Medicine faculty. The title of the class show, which was a take-off on telethons, was "Dowton's Kids." S. Bruce Dowton, M.D., is associate dean for medical education. The annual event took place in Moore Auditorium.

Joel Cooper named cardiothoracic surgery division director

Joel D. Cooper, M.D., the Joseph C. Bancroft Professor of Cardiothoracic Surgery, was named director of the Division of Cardiothoracic Surgery.

The appointment, effective June 1, was announced by Samuel A. Wells Jr., M.D., the Bishop Professor of Surgery and director of the division.

"Dr. Cooper has earned a worldwide reputation as an innovative surgeon," he said. "He is also a talented administrator and an excellent teacher," Wells said. "We are excited to have him lead the Division of Cardiothoracic Surgery." Cooper is professor of surgery at the University of Texas, Houston Medical School, chief of thoracic surgery at the University of Texas, Houston Medical School, and associate professor of thoracic surgery.

"His appointment is an opportunity that greatly improves the breadth of experience of our patients," he said. "He has been a leader in the treatment of lung disease. Cooper completed the first successful single-lung transplant and the first double-lung transplant. He also developed lung volume-reduction surgery, a technique that greatly improves the breadth of experience of our patients. An author or co-author of nearly 300 scientific articles, Cooper has served on many medical advisory and editorial review panels in the surgical field. He is a member of 20 medical societies. Recently, he received the Jacobson Innovation Award from the American College of Surgeons, an award that honors living surgeons who have developed new surgical techniques.

Previously a professor of surgery at the University of Texas, Cooper joined the School of Medicine faculty in 1994. Cooper succeeds James L. Cox, M.D., the Evarts A. Graham Professor of Surgery, who has accepted a position as chief of the Section of Cardiothoracic and Vascular Surgery and director of the Georgetown Cardiovascular Institute at Georgetown University Medical Center. In the past 14 years, Cox has built an outstanding cardiothoracic surgery program with an international reputation and recruited outstanding faculty for the division.
On a sunny day in 1995, a professional motorcycle racer hit a guardrail at 120 mph, crushing his lungs and pelvis. The same day, an obese diabetic woman went to the hospital with severe stomach pain. Flesh-eating bacteria were destroying her abdominal wall. Also on that day, a young U.S. Air Force officer survived his liver in a car crash. Doctors weren’t sure they could stop the internal bleeding.

Timothy G. Buchman, M.D., Ph.D., professor of surgery, of anesthesiology and of medicine, treated all three of these patients after other hospitals sent them to Barnes-Jewish Hospital. As a trauma surgeon and chief of the Burn, Trauma and Surgical Critical Care Section of the Department of Surgery, Buchman can’t predict what calamity he’ll see next. He just waits for the next patient and does what he can.

One of those three patients died. But two are walking around today with few physical signs of the experience.

“What’s most appealing about our intensive care unit (ICU) is we can take deadly ill patients and send them home,” Buchman said. “It’s an enormous intellectual challenge, and it’s immensely rewarding.”

Winter in St. Louis means blunt trauma from falls and car crashes. Perhaps a family will be seriously burned while huddling around a kerosene heater. In the summer, area residents start getting stabbed and shot. They squit outra-geous amounts of lighter fluid on their barbecue grills. They also drink and drive. Throughout it all, the ICU manages to keep its survival rate above 90 percent, and it has maintained its status as the premier trauma center in the region. “If it can’t be done at Washington University, it can’t be done any-where,” Buchman said.

The first hospital that saw Jeff Eklund after his motorcycle crash couldn’t handle his injuries. A 1-hour meeting with a wall does incredible damage. He was bleeding to death in his pelvis, and his crushed lungs weren’t getting air. That hospital sent him to the Barnes-Jewish Trauma Center.

By the time he arrived, Eklund’s skin was dark blue. The trauma team inserted a breathing tube, and the orthopedic surgeons drilled pins into his pelvis, attaching a metal frame to Eklund to keep his bone fragments together. Intervventional radiologists snaked a catheter up his pelvic artery, successfully creating a gauze. The officer recently visited Buchman and the patient, shaky from blood loss, has a vague feeling of being surrounded as his stretcher rolls through the front door. The doctors and nurses around him have specific jobs with consistent tasks. They don’t have many responses to trauma. Some cells activate genes that lead to widespread inflammation, which, if sustained, can cause multiple organ failure.

Other cells commit apoptosis, or cellular suicide. Cells just don’t know how to respond. If doctors can find a way to keep traumatized cells from destroying themselves or the rest of the body, more patients will survive their injuries. Buchman said.

“The impact of this cannot be overstated because widespread inflammation and multiple organ dysfunction syndrome remain the leading causes of death in surgical intensive-care units,” he said. “The notion that we might have a chance to sustain these people is terribly exciting.”

Buchman joined the School of Medicine in 1994, where he now studies the treatment of multiple organ failure and the cell- to-cell communications that lead to cellular suicide.

Trauma team
Buchman couldn’t save the woman suffering from flesh-eating bacteria. Her abdominal wall dissolved in front of him. He cut out most of the wall, but the bacteria already had inflicted a fatal wound.

The trauma team at the medical school holds highly choreographed performances every day. The medical school has the region’s only nationally verified level-one trauma center (meaning it offers the highest level of emergency care), so it gets the most severe cases. Perhaps a St. Louis man is shot in the chest. A common scenario. The trauma center might receive a dozen patients victims on a busy day. Realizing the man is nearly dead, the medical school has the region’s only nationally verified level-one trauma center (meaning it offers the highest level of emergency care), so it gets the most severe cases. Perhaps a St. Louis man is shot in the chest.

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Exhibitions
"Curtain Time: Student Performing Activist in the 1960s and 1970s," Through May 30. Special Collections, level five, Olin Library. Hours: 8:30 a.m. to 5 p.m. weekdays. 935-5495.

Master’s of Fine Arts Thesis Show. Opening reception: 5 to 7 p.m. April 18. Exhibit runs through May 4. Gallery of Art, upper and lower levels, Steinberg Hall. Hours: 10 a.m. to 4:30 p.m. weekdays; 1 to 5 p.m. weekends. 935-4522.

Midway." First-year master’s of fine arts students host an exhibit representing a range of styles and media, through April 25. West Campus Bldg. Hours: 11 a.m. to 4:30 p.m. weekdays. 935-4761.

Films
All Filmboard movies cost $3 and are shown in Room 100 Brown Hall. For the Filmboard hotline, call 935-5983.

Tuesday, April 22
6 p.m. Chinese Film Series. "The Story of Qiu Ju." Room 219 South Redlyngh Hall. 935-5155.

Tuesday, April 25
7 p.m. Filmboard Feature Series: "After Hours." Also April 26, same time. 935-5155.

Midnight. Filmboard Midnight Feature Series. "Follow That Bird." Also April 26, same time. April 27 at 9:30 p.m.

Lectures
Thursday, April 17


1:30 p.m. Mental health seminar. "The Problem of Necessity," Valerie Lloyd, associate professor in philosophy. Stix Hall. Hours: 8:30 a.m. to 4:30 p.m. weekdays. 935-5614.


4 p.m. Biostatistics seminar. "Genetic Structure and Pathways Project," a follow-up study on the Youth Services Project. Room 353 West Campus Administrative Center. 935-5867.

Friday, April 18
9:15 a.m. Pediatric Grand Rounds. Irion Duggan, Douglas N. Schenkein, profs. of pediatric medicine and pharmacology. Room 101 Children's Place. 935-4604.


Friday, April 18


Thursday, April 24
11:15 a.m. Mental health seminar. "Overview of Research Project: Gateways to Space Project," a follow-up study on the Youth Services Project. Room 353 West Campus Administrative Center. 935-5867.


4 p.m. Earth and planetary sciences colloquium. Topic to be announced. Speaker is Robert R. Gillies, assst. prof. of plants, soils and biotechnology, Utah State U. 935-5610.


8 p.m. WU Chorus concert. WU Chorus concert. Featuring the WU Symphony Orchestra and the Chamber Choir of WU. Performers include students from Dan Ferguson, Shoob Schurier, Igor Strevisano and Orotonio Mbarak and guests from the music department of the University of Pittsburgh. Director of the orchestra: Elizabeth Macdonald, director of strings, and John Stewart, director of the choir, St. Louis Symphony Music School, 560 Trinity Ave. (See story on page 3.) 935-5381.

Tuesday, April 22
8 p.m. Student study concert. Program includes the music of J. S. Bach, Charles Willard, guitar. Graham Chapel. 935-3941.

Wednesday, April 23
5 p.m. Black repertory composers' concert. Program includes the music of Erykah Badu and Take Six. Directed by Daniel Daumit, choral director, music dept. Steinberg Hall Aud. 935-4841.

Saturday, April 26

Performance
Friday, April 18
6 p.m. Student dance concert. Co-sponsored by Thyrsus and CS40. Also April 23 and 26, same times, and April 19, same time, and April 20, same time. Cost: $4; $3 for senior citizens and students. Curt Aud., 4565 McKinley Ave. (See story on page 3.) 935-6543.

Music
Saturday, April 19
8 p.m. Graduate piano recital. Program includes Ludwig van Beethoven's Sonata in E flat major. Student pianist, piano. Steinberg Hall Aud. 935-4841.

Sunday, April 20
3 p.m. Seventh Annual Chancellor's Concert. Featuring the WU Symphony Orchestra and the Chamber Choir of WU. Performers include David Penn, Shoob Schurier, Igor Strevisano and Orotonio Mbarak and guests from the music department of the University of Pittsburgh. Director of the orchestra: Elizabeth Macdonald, director of strings, and John Stewart, director of the choir, St. Louis Symphony Music School, 560 Trinity Ave. (See story on page 3.) 935-5381.

Miscellaneous
Thursday, April 17
6:30 5 p.m. Human Resources Training and Development Center seminar. "Managing Change and Stress," Jil Emspark, training and development specialist, Office of Human Resources Training and Development Center. Suite 100, Room B West Campus Administrative Center. 935-6970.

Tuesday, April 22
7:00 p.m. American Indian Awareness Week. Blackhouse Mitchell, Navajo artist. Lower level, Mallinckrodt Center. (See page 6.) 9-4510.

Tuesday, April 29

Wednesday, April 30
12:30--2:00 p.m. Spring break.
Harnessing the wind for energy — from page 1

1947 with offers from Flettner in New York and James McDonnell in St. Louis, who also was involved in helicopter development. He chose then-named McDonnell Aircraft Corp., where he served as chief aerodynamics engineer of the Helicopter Division for 18 years. In 1965, Hohenemser became a professor of aerospace engineering at the University, where he taught for several years as an adjunct professor.

Shifting gears
Hohenemser became interested in wind-turbine energy in the 1970s in the midst of the Arab oil embargo and the near-frantic search for alternative energy. Since then, thousands of wind turbines have been erected worldwide, with Denmark leading the way in Europe and California leading the United States. Hohenemser has applied his knowledge of helicopter rotors to the problem of generating electric energy from the wind.

"Today, as in the past, most wind turbines in operation use propellers with rigid blades, similar to airplane propellers," Hohenemser said. "But these have drawbacks. The chief one is that they are not well suited to operate in oblique flow when the wind direction is not perpendicular to the rotor plane. Also, operation at high winds requires their use of changes in pitch of their blades, which involves a complex design."

The helicopter-type rotor avoids these drawbacks because it readily accepts oblique flow conditions. A saw-tooth edge on the hub of the blade's hub rotates the turbine to rapidly adjust to wind direction changes. In traditional wind turbine design, wind following is associated with rather large aerodynamic and inertia blade loads.

The main problem turbine designers confront is that the wind power available to a wind turbine increases with the cube of the wind speed. For example, a speed of 50 mph yields a thousand times more power than a speed of 5 mph.

"A wind turbine is a rather difficult-to-design system because it has to work efficiently at low wind velocities as well as at high power, and it also has to withstand storm winds," Hohenemser said. "Recently, I've incorporated into the Tyson wind turbine a variable speed capability by running the induction generator in a self-excited mode instead of excitation from the grid. Off-grid operation is needed in isolated regions, and variable speed is more efficient and reduces blade loads."

Early data are encouraging.
Hohenemser said, indicating that the variable speed mode of the induction generator works. "To my knowledge, no wind turbine has used this induction-generator mode of operation as yet," he said. "It will be interesting to learn more about it in the coming tests."

His early wind turbine research was carried out through Washington University Technology Associates in conjunction with David A. Peters, Ph.D., professor and chair of mechanical engineering at the University of Texas, El Paso; and others. Since then has duplicated the Tyson wind turbine and is using it in experiments in Southwest Texas. The work was sponsored by the Solar Energy Research Institute (SERI), which is now the National Renewable Energy Laboratory (NREL). Hohenemser has published reports over the years with SERI and NREL and is planning another on the present studies.

All funding was dropped after 1985, but Hohenemser has continued the research on his own time with the assistance of Tyson personnel, who keep the access to the turbine clear, and with the help of a retired helicopter-engineering colleague from McDonnell Douglas Corp. While the perfect data day — dry and gusty — is a rarity for Hohenemser, he visits Tyson at least every other week in warm months to check and maintain the equipment.

"I love working out at Tyson, although it is not the best place to capture the wind," Hohenemser said. "But this, then, is Texas or California."
— Tony Fitzpatrick

Kurt Hohenemser, Dr.Ing., looks forward to gusty days when he can study the wind turbine at Tyson Research Center.

NOTE
Maki closes architecture's spring lecture series

Renowned Japanese architect and 1993 Pritzker Prize winner Fumihiko Maki will lecture on "Architecture and Materiality" at 8 a.m., Monday, April 21, in Steinberg Hall Auditorium. Maki is the School of Architecture's Ruth and Norman Moore Guest Visitor. He will deliver the inaugural Fumihiko Maki Endowed Guest Lecture, which was established by a generous gift from the estate of Erin J. Russell of St. Louis. The lecture is the final installment of the school's spring 1997 Monday Night Lecture Series. Reviews are welcome. For more information, call (314) 935-4510.
Best health books listing includes WU authors

For The Record contains news about a wide variety of faculty, staff and student scholarly and professional activities.

Of note

Linda M. Davidson, manager of clinical support services at the Mallinckrodt Institute of Radiology, recently was named a Fellow of the Healthcare Financial Management Association (HFMA). She is among the fewer than 7 percent of health-care professionals nationally who have successfully earned the designation. Candidates are assessed for their technical proficiency as well as their understanding of professional and managerial responsibility. In earning the fellowship, Davidson demonstrated knowledge of financial management, a managed care professional.

For The Record contains news about a wide variety of faculty, staff and student scholarly and professional activities.

Babie Joseph, Ph.D., the Edward C. Dickey Professor of chemical engineering, has received a $200,000 two-year grant from the National Science Foundation for a project titled "Vegetable Control of Quality in Composite Manufacturing Processes." The objective of the research is to lower manufacturing costs of polymer materials, such as fiberglass-reinforced composite laminates, through the use of advanced models based on control techniques. Currently, these advanced materials primarily are used in the defense industry, but lower costs would make these materials more attractive in many civilian industrial applications, such as for lightweight aerospace structures.

On assignment

Wendy Hyman-Flite, director of the English as a Second Language Program, presented a session titled "Examining Our English as a Second Language Program," at the 31st annual international convention of Teachers of English to Speakers of Other Languages, held March 13 in Orlando, Fla.

Speaking of

Ronald M. Levin, J.D., professor of law, recently spoke at a subcommittee meeting of the Consumer Finance Committee of the Section of Business Law at the annual convention of the American Bar Association held in Orlando, Fla. Levin addressed the administrative law implications of the U.S. Supreme Court's recent decision in "Smithy vs. Citibank." In addition, the Council of the Section of Administrative Law and Regulatory Practice endorsed a resolution and report drafted by Levin. The resolution suggests guidelines for reviewing courts to use when they remand an administrative action to an agency without simultaneously vacating the action.

Undamaged spirits

Despite an unexpected spring snow, Lanetta Greer of Milwaukee, Wis., (standing left) and Phyllis Broussard of Lafayette, La., (with camera) enjoy an indoor barbecue at Mallinckrodt Center on Thursday, April 10. The cook-in was part of Washington University's Multicultural Celebration weekend, which drew more than 225 prospective students to the campus. The barbecue was co-sponsored by several student groups, including the Association of Black Students, ASHKOA (the American Indian students association), the Asian Multicultural Council, the Asian Students Association, the Chinese Students Association, the Association of Korean Students, SHADES (a multicultural student organization) and the Association of Latin American Students, as well as the Office of Undergraduate Admissions.

Obituaries

John Grant, associate professor of clinical medicine

John Mosby Grant, M.D., associate professor of clinical medicine, died of cancer Tuesday, April 1, 1997, at his Central West End home. He was 70.

A graduate of Princeton (N.J.) University, Grant received his medical degree from the Washington University School of Medicine in 1953 and joined the faculty in 1959.

He conducted his clinical practice at the Grant Medical Clinic, founded by his father, Samuel H. Grant. He also served on the staff of Barnes-Jewish Hospital, St. Luke's Hospital and of the St. Louis Regional Medical Center.

An internist with a strong interest in psychosomatic ailments, Grant showed remarkable compassion for his patients.

When some doctors began leaving the city in the mid-1970s, Grant and his brother, Neville Grant, M.D., professor of clinical medicine, stayed at the Grant Clinic, where they felt they could best serve the community.

John Grant was an enthusiastic community advocate and politician dedicated to improving the Central West End. He was a leading officer of the Second Presbyterian Church, and he was one of the founders of the Joint Community Board, a church group that addresses neighborhood problems. In the 1960s, Grant served as president of the Missouri Mid-City Community Congress.

A funeral service was held April 6 at the Second Presbyterian Church.

Contributions may be made to the John Grant Memorial Fund in the Grant Medical Clinic, 415 Delhaville Ave., St. Louis, MO, 63110; to the Second Presbyterian Church, 4501 Westminster Place, St. Louis, MO, 63108; or to the Quartet Seraphin, 6963 Columbia Place, St. Louis, MO, 63110.

Survivors include his wife, Diane D. Grant of St. Louis; a daughter, Natalie T. Grant of Huntington, W.V.; his mother, Natalie N. Grant of St. Louis; and two brothers, Neville and Samuel B. Grant, both of St. Louis. His first wife, Margaret T. Grant, died in 1993.

John M. Grant

John M. Grant

Margaret T. Grant, died in 199X both of St. Louis. His first wife, Natalie N. Grant of St. Louis; and two children of St. Louis.

Olive Grant, of St. Louis; and two children of St. Louis.

The Socially Responsive Self

Social Theory and Professional Ethics

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Accounts Payable Service Representative

Requirements: high school education or equivalent, strong communication, organizational, verbal and alphanumeric skills, database and data entry experience, ability to independently perform work with accuracy; to work independently; to work effectively with other co-workers. Minimum of two years of related experience required. Applicants are encouraged to request applications. External candidates must apply through Jeannine McMillan, Network Technician 970751-R.

Memories of Thurtene Carnival

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