Women's concerns

Faculty report urges more tenured positions, help with child care

BY SUSAN KILLENBERG MCGINN

Increasing the number of tenured and tenure-track positions on the Hilltop Campus and exploring the possibility of on-site child care facilities are two of the recommendations made in a recently released report by Washington University's Association of Women Faculty (AWF).

Compton, Cori Award nominations sought to honor faculty achievement

Chancellor Mark S. Wrighton and Arnold W. Strauss, M.D., the Alumni Professor of Medicine and chair of the Faculty in the division to the faculty to nominate recipients of next year's Faculty Achievement Awards. The Faculty Senate Council and Wrighton will select the annual awards, now known as the Arthur Holly Compton and the Carl and Gerty Compton Faculty Achievement Awards, in spring 1999.

The Compton Award is given to a distinguished member of the faculty from one of the seven Hilltop schools and the Cori Award to a faculty member from the medical school.

The awardees will be announced at the Chancellor's Gala April 15, 2000. The recipients will be asked to give an address to the University community next fall outlining their outstanding scholarship.

Apprenticing youths as teachers

BY DAVID MCDONNELL

J rones just wasn't getting it. Uninspired by the words in his textbooks, the fifth-grader had fallen behind in his studies. He was frustrated and discouraged, disparate to the point that no one wanted to work with him.

Enter Theresa Gladney. A 17-year-old volunteer as an after-school tutor, Gladney took a look at Jones' history and quickly set aside the book. And then she brought the 12th century back to life. "We reacquainted the entire chapter," she recalled. "I just jumped up and said, 'Stand right here — you're the pilgrim.'"

"I just want to bring my knowledge to kids in a different way — a way in which they understand it," Gladney said with infectious enthusiasm. "You need a whole bunch of different ways of teaching one thing, because not everyone can pick up on the conventional way."

Gladney was one of more than 100 potential "teachers of tomorrow" on campus as of April 29 as part of an Apprentice Teacher Project workshop. The project, funded by the Danforth Foundation in partnership with the Metropolitan St. Louis Alliance of Black School Educators (MSLABSE) and six area school districts, is an effort to interest local African-American high school students in education careers.

Currently there are 150 MSLABSE Scholars, as they are known — about 25 each from Berkeley, Parkway South, Beaumont, Sumner, Nadon, University City, Normandy and Eakridge high schools.

The project is comprised of three primary components: an extensive after-school tutoring program that totals 2,000 hours a year, a steady stream of college preparatory and teacher development opportunities and a mentoring program that pairs each scholar with an adult who has a background in education.

"I don't let the kids hear me saying this, but we know they're not all going to be teachers," said project administrator Flossie Henderson, who Gladney described as "like the mother of everybody in the program."

"On my goodness, though," Henderson said with a sigh. "The numbers are so scary. In terms of teacher availability in the next 20 years of any ethnic background, it's scary. Bottom line, we have a shortage now of available, qualified teachers to work with young people. And where race and ethnicity play in, the numbers are even more scarce. And, as we now know in terms of how learning happens, if you look like me, that sometimes helps."

Gladney, who observed that "they really want us to be educators — not just teachers," is among the full converts. The Parkway West senior, who is considering Washington University among her collegiate options, said that the opportunity to tutor two days a week at Hanna Woods Elementary School has refueled her dream to teach.

Pathfinder program links disparate fields in sustainability studies

BY TONY FIEDLARSZ

California's Mojave Desert and Hawaii's Big Island are steps along the pathway of an exciting new Washington University program called Pathfinder, scheduled to begin fall 2000. Pathfinder is a program in the Division of Natural Sciences and Math, and is available to engineering students — designed to help shape the future of the academic careers of 15 of the University's top incoming freshmen.

These students will choose major interests in the School of Engineering and Applied Science, and they will work in the field and in the Pathfinder Program, conducting rigorous environmental research and exploring research topics from environmen
tal sustainability perspectives. Pathfinder students will be directed in the efforts of Raymond L. Arvidson, Ph.D., the James S. McDonnell Distin- guished University Professor and chair of the Department of Earth and Planetary Sciences in Arts & Sciences. Students also will be paired with a graduate fellow.

The first year will focus on general and World studies earlier in the decade, both combining challenging field work with environmental issues. Both can be considered Pathfinder's progenitors.

"Pathfinder is unique," said Arvidson. "It's a program that puts one group of students together for four years with one adviser, and the concentration is on environmental sustainability, although each of the 15 students could have a different major. The emphasis is on addressing problems from multiple perspectives.

"While environmental science is a big component of the program," he added, "Pathfinder is completely different from the Environmental Studies Program. It's a pathway that's consistent with any major in the division or within the school of engineering."

Students in the Class of 2004 will receive a promotional brochure about Pathfinder upon acceptance to the University. For the first group of Pathfinder students, who start next year, the curriculum provides that:

* Freshmen will take an introductory course in environmental sustainability in coordination with an English composition course, an environmental ethics course and a case study of the Mojave Desert, accomplished during spring break.

* Sophomores complete a core study of Hawaii and sustainability issues associated with volcanism, earthquakes, landslides and tsunamis, as well as eco-tourism and sustainability in Hawaii. The University and students split the travel costs.

* The junior year includes a coordinated study of some critical issues in environmental sustainability.

* The senior year culminates with a "capstone experience" involving a seminar and an associated honors thesis focusing on the student's study topic. It will address issues and solutions discovered in the student's areas of interest.

See Pathfinder, page 6
Asia Forum Panelist Theodore Cook (left), professor of history at William Patterson College of New Jersey, makes a point at the 1999 International Student Conference, organized by Asia Forum, a University undergraduate organization. The two-day academic conference, held Nov. 12-13 in the Reitz University Center, is being held in conjunction with a series of events to commemorate the 50th anniversary of the Nanking Massacre of the late 1930s. Looking on, from left, are B.T. Whakabayashi (obscured) of York University, Timothy Brook of the University of Toronto, Washington's political science professors Matthew Burr and Lauren Mandell, and Yang Daqing of George Washington University.

Debate team is coming on strong

By John Hirs

This house resolves that it is a good idea to take a bake sale every day. You and your debate partner will spend a week developing a logical and rhetorically convincing argument against this resolution. The speaker, or critic, is waiting, as is your competition. The clock is ticking.

In its first competition this year at Middle Tennessee State University, the team's novice debaters won the AWF Region V debate tournament for the university in, Murfreesboro, Tenn., the Office of Public Affairs, Washington University.

The life sciences industry will discuss its challenges and potential benefits in a symposium from 4 to 6 p.m.

RECORD Numero 719, published for the faculty, staff and friends of Washington University in St. Louis.

Life sciences symposium set

Programmed academic, research and business leaders of St. Louis' life sciences industry will discuss its challenges and potential benefits in a symposium from 4 to 6 p.m. Nov. 29 at the John M. Olin School of Business' May Auditorium.

The life sciences industry began many years ago with the development of a new antibiotic.

Panelists will discuss implications of life sciences research for business, medicine and capital markets.

Panelists will be Roger N. Benjamin, MD, PhD, CEO of the Donald Danforth Plant Science Center; Donald Krohn, vice chancellor of the school's Forrester Center for infectious disease research; and Donald Skipper, a professor of chemistry who holds 14 patents related to his research at the Center for Engineering and director of the University's Institute for Biological and Medical Engineering.

Moderators will be Spencer B. Burke, managing director, investment banking, A.G. Edwards & Sons, Inc., and Stuart I. Greenbaum, PhD, dean and professor of finance at the business school.

Also, AWF recommends that the report's "mentoring is a crucial role," Rigdon said, "an exciting time."

The report has started a "new policy gives inventors more freedom when their research is transferred to the private sector, but more work needs to be done to provide assistance and benefits to researchers," Rigdon said.

The survey results were published in the AWF report, written by Mary Ann Drubach, PhD, assistant professor of English, and Lee Epstein, PhD, the Edward Mallinckrodt Jr. Distinguished Professor of Political Science, both in Arts & Sciences. Washington University is making progress toward diversifying women in tenured positions at both the associate and full professor levels, from 11.2 percent of full professors in 1995-96 to 19.1 percent in 1997-98 and from 19.1 percent of associate professors in 1995-96 to 27.9 percent in 1998-99. Of the University's assistant professors in 1998-99, 39.8 percent were women.

Women constitute 40 percent of the total student population at the University.

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Most of the respondents for the AWF report said that they are "having a greater impact on the world outside of the office," Rigdon said. "They did very well," Rigdon said as she sat next to a bookcase crowded with trophies. "Their debating awards win in the competition," Rigdon said as she sat next to a bookcase crowded with trophies. "Their debating awards win in the competition.

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"Our advice is to really not focus on a particular field and develop your general knowledge in the field, and connections with sources of grant support and patent law."
School of Medicine students, recognized extraordinary faculty members for their dedication to teaching at a ceremony Nov. 10 in the Eric P. Newman Education Center. In addition to a number of faculty who received the Distinguished Service Teaching Awards, five honors were recognized for their dedication to teaching in medical student education. Those honorés and their awards were: Glenn C. Conroy, Ph.D., professor of anatomy and neurobiology, Class of 2002; Jason Hickman, M.D., associate professor of physiology, Class of 2001; and of 2001; C. Arie Perry, M.D.; Jeffrey E. Saffitz, M.D.; Patrick R. Murray, Ph.D.; Brian S. Misler, M.D., Ph.D.; Jay F. Misler, M.D.; Yoon Kang, M.D.; and Jean P. Molleston, M.D.; William E. Clutter, M.D.; John P. Atkinson, M.D.; Mokhtar Misler, M.D., Ph.D.; Jay F. Molleston, who recently delivered the inaugural lecture as part of the Pan American Perspectives lecture series. Molleston has received numerous awards, including election to the American Academy of Arts and Sciences, the American Physiological Society, and the California Academy of Sciences. Molleston was also named a fellow of the American Society for Investigative Pathology. Molleston also received the Distinguished Alumni Award from the University of California, San Francisco (UCSF), where he was awarded the Distinguished Service Teaching Award. This year's teaching awards ceremony was held Nov. 10 in the Eric P. Newman Education Center.

A teacher affects eternity; he can never tell where his influence stops.

The first-year anatomy course was taught by professor and assistant dean of the Brown University's Division of Biology and Medicine before joining the faculty here. His work on the nematode C. elegans, in which he studied the role of a protein called IGF-I in the control of blood pressure, has provided insights into the molecular basis of blood pressure regulation. His research has helped to identify the role of IGF-I in regulating blood pressure in both healthy and diabetic individuals. This has led to the development of new therapies for the treatment of hypertension and diabetes.

Beyond the ordinary

Students highlight outstanding teachers at ceremony

Cynthia Kenyon

Cynthia Kenyon has been awarded the Distinguished Service Teaching Award since 2000, the first year that this award was given. She has received numerous awards for her teaching, including the University-wide Distinguished Service Teaching Award and the University-wide Distinguished Service Teaching Award in 1999. She has also been named a fellow of the American Academy of Arts and Sciences, the American Physiological Society, and the California Academy of Sciences. She was also named a fellow of the American Society for Investigative Pathology. She has received the Distinguished Alumni Award from the University of California, San Francisco (UCSF), where she was awarded the Distinguished Service Teaching Award. This year's teaching awards ceremony was held Nov. 10 in the Eric P. Newman Education Center.

A new study reveals that long-term nerve damage in rats with diabetes can be reversed by treatment with an insulin-like protein. The research, published in the Journal of Neuroscience, suggests that the protein could be a new target for treating nerve complications in diabetes.

"We may be able to prevent some diabetic nerve complications, even in people who don't control their diabetes well," said Robert E. Schmidt, M.D., professor of neurology. "The results suggest that the protein could potentially be used to prevent nerve complications in diabetes." Schmidt is quick to note that "simplistic view is that diabetes leads to nerve damage. In the sympathetic nervous system, the outermost layer of ganglia, which occurs to a limited extent in rats not treated with IGF-I, mimicked that seen in humans. After the rats had been treated, the sympathetic nerve cells," he said.

Schmidt studied the effect of insulin-like growth factor-1 (IGF-1) on diabetic rats. He grouped the animals into two groups: sympathetic nerve tissue and the outermost layer of ganglia. The rats in the IGF-1 group were able to control their blood pressure and blood flow to the nervous system, reducing the swelling associated with diabetes. The rats in the control group were unable to control their blood pressure and blood flow to the nervous system, resulting in swelling. The swelling was less pronounced in the IGF-1 treated rats.

Schmidt is quick to note that "swelling of nerve endings still occurs in diabetic rats, but it can be treated with IGF-1." He also has found that healthy rats develop the swelling in small numbers as the rats age. "We have a sense of the potential relevance of this growth factor," Schmidt said. "Now we have to figure out how it works." He and his colleagues will evaluate the cellular changes occurring in diabetic rats to determine how the swelling occurs. They also will try to determine how IGF-1 injections ameliorate the damage.

The growth factor doesn't stop diabetes in its tracks because treated animals are unable to control their blood pressure. Instead, the IGF-1 injections might stimulate or modulate the factors that keep nerve cells healthy, or it might be a "hanging off agent." In any case, "we have a sense of the potential relevance of this growth factor," Schmidt said. "Now we have to figure out how it works." Researchers elsewhere are evaluating IGF-1 in clinical trials on people with neurodegenerative diseases such as amyotrophic lateral sclerosis, or Lou Gehrig's disease.
Margaret Leng Tan entertains on toy piano.

Two renowned artists lecturing in December

Two internationally renowned installation artists will discuss their work in a pair of lectures at the Gallery of Art in December. "Art of the Toy Piano" will be held Wednesday, Dec. 8, 7:30 p.m. Dec. 1, Eleanor Antin, a performance artist and filmmaker, will speak at the University's Visual Arts and Design Center at 7:30 p.m. "Art of the Toy Piano" exhibition of Antin's work is scheduled to open at the Gallery of Art on Dec. 1.

Wilson's work explores the narratives of marginalized groups in displays and historical settings, and the social and political role of art as a tool for change. His lectures will be held in the Visual Arts and Design Center on Dec. 1, 7:30 p.m. In his "Art of the Toy Piano" exhibition, Antin's work is scheduled to open at the Gallery of Art on Dec. 1.

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Wednesday, Dec. 1

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PA-D closes millennium with Beckett's "Endgame"

By LAM OTTEN

Bare interior, gray light. A door, a wall, a picture, a screen, a drawer. Three characters trapped in immobility, a fourth trapped in motion, sound familiar?

Next month the Performing Arts Department (PAD) in Sciences & Sciences will close Sam Beckett's classic work of modernist "Endgame."

Performances begin at 8 p.m. with matinee performances at 3 p.m, Dec. 2 and 5. Performances take place in the A.E. Hotchkin Studio Theatre. Room 208 Millikin Centre. Beckett's second full-length play, "Endgame" debuted in 1957 and was considered by its author to be his finest dramatic work.

The play, which follows the personal dynamics among four characters: Hamm, the blind tenant; his parents, the elderly Nagg and Nell, who live in a pair of attics; and Hamm's mute put-upon servant, Cloe. Like the author, the director and the cast, "Endgame" is set in an anonymous, rather bleak and vaguely modernist world.

"Endgame" was one of the most important, influential plays of the 20th century, and I think it's appropriate to explore him again now, before we go into the next millennium," she explained. "Beckett was one of the most interesting, influential playwrights of the 20th century, and I think it's appropriate to explore him again now, before we go into the next millennium."


Saturday, Dec. 4 8:30 p.m. "Winged Feats." Toronto Dance Theatre, with music of Poulenc, including "Concerto for Two Harps," Graham Chapel. 935-4841.

Monday, Dec. 22 8:00 p.m. "Winged Feats." Toronto Dance Theatre, with music of Poulenc, including "Concerto for Two Harps," Graham Chapel. 935-4841.

Tuesday, Nov. 30 4 p.m. Molecular and Biomedical Research Seminar, "The role of the Cerebellum in Development of Biomaterials for Use in Neural Regeneration." Cynthia J. Bell Laboratories, Lucent Technologies. Room 311 McMillen Lab. 935-7316.


Friday, Dec. 3 8:00 p.m. QUINTONI Series performance. "Too BadSchwitz: The Art of the Fly Trap." Margaret Long Ragland, nos. 40-2, 41-1, for children. Edwards Studio, 935-6543.

Sports

Saturday, Nov. 20 10 a.m. WU Thanksgiving Invitational. Swimming and diving. Mizzou Pool. 933-5223.

Sunday, Nov. 21 5:30 p.m. WU Thanksgiving Invitational. Swimming and diving. Mizzou Pool. 933-5223.
Students work together throughout four years—

The freshman and senior years put heavier emphasis on Pathfinder activities, the sophomore and junior years will focus primarily on the student’s major. The motivation behind the Pathfinder curriculum is to enhance undergraduate education by making it more interdisciplinary, inquiry- and research-based. Students may choose to pursue their undergraduate education through a major field of inquiry that is driven by their interests or to pursue one that enables them to explore the Mauna Kea environment. You can find information about the program on the field streets.
Baldez is Harbison Faculty Fellow

Lisa Baldez, Ph.D., assistant professor of political science in Arts & Sciences, has been named the Earle H. and Suzanne S. Harbison Faculty Fellow. The fellowship provides support for political mobilization and policy making, especially with regard to gender issues in Latin America. In 1999, she and John Carey, Ph.D., assistant professor of political science, published "Politics of 1999: Mexico and Spending Policy: Lessons From General Peschado's Constitution" in the Journal of Political Science. Baldez has published eight chapters in edited volumes and is currently working on a book, "Women Protest: Mobilizing for Change in Chile," which examines the conditions under which women organize on the basis of their identity as women. Baldez participates in numerous political science committees, including current roles as an executive board member of the Women's Caucus for Political Science. She is senior lecturer in the American Political Science Association and as chair of the Gender and Politics section for the Midwest Political Science Association. She teaches courses on gender and politics, Latin America and comparative politics in general. Her courses include "Gender and American Politics," "Gender Politics in Global Perspective" and "Revolution and Protest in Latin America." Earlier this year, she taught a course on democracy at the Catholic University in Chile as part of the University's Center in Political Sciences. Baldez teaches courses in gender and politics. Her students have praised her knowledge and skill in the classroom, and her work has growing recognition in the field of political science. I look forward to great things from her in the years to come.

Benson oversees a 16-member staff of editors, graphic designers and periodicals annually, in addition to her current role as executive director of University publications in the Office of Public Affairs, according to Benson. A 1967 magna cum laude graduate of Washington University, Benson earned a doctorate in political science from the University of Chicago. She also earned a master's degree in public administration from the University of California, San Diego, in 1997.

The faculty fellowship was established in 1995 by Earle Harbison, who graduated from Washington University in 1948 with a bachelor of arts in political science, and his wife, Suzanne, who earned a degree from the John M. Olin School of Business in 1949.

Earle Harbison is chairman of Harbison Corp. and president and chief operating officer of Monsanto Co. He serves on the University's Board of Trustees and as chair of the Arts and Sciences Council. The Harbison Fellowship rotates every three years to an outstanding junior faculty member in Arts & Sciences; the first holder of the fellowship was Frank Monson, Ph.D., assistant professor of music in Arts & Sciences.

Benson holds a bachelor of arts degree in English and a master of arts degree in journalism, both from the University of Missouri. Benson currently is completing a doctorate in higher education administration at the University of Chicago.

The proposal was recognized in the annual conference of the Association of Collegiate Schools of Architecture. Benson oversees the Department of Architecture's Office of Publications and the Office of Student Life's editor-in-chief in 1976-77, confers with junior Sarah Kaufman, Student Life's current associate editor, during a Nov. 5 tour of the student newsroom. Freeman is one of 13 directors for the newly formed Washington University Student Media Inc. (WUSM), a for-profit organization recently formed to act in the capacity of Student Life's publisher. Working behind Freeman and Kautman are news editor Brian Hammond (left) and on-line editor Chris Hilt, both sophomores.

Pressing issues St. Louis Post-Dispatch columnist Greg Freeman, who served as Student Life's editor-in-chief in 1976-75, cofounded with junior Sarah Kaufman, Student Life's current associate editor, during a Nov. 5 tour of the student newsroom. Freeman is one of 13 directors for the newly formed Washington University Student Media Inc. (WUSM), a for-profit organization recently formed to act in the capacity of Student Life's publisher. Working behind Freeman and Kautman are news editor Brian Hammond (left) and on-line editor Chris Hilt, both sophomores.

Awards Nominations sought to honor faculty

— Tom Pohl

Last year Gerald L. Early, Ph.D., and Patricia Martin, Professor of Modern Languages and professor of English and African and Afro-American Studies in Arts & Sciences, was named the first recipient of the Compton Award, and Marcus Raichle, M.D., professor of radiology at the medical school, the inaugural recipient of the Cori Award. Early and Raichle gave their addresses and received their awards Sept. 27.

An advisory committee, co-chaired by Strauss and Gerald S. Burner, professor of Modern Languages and Literatures in Arts & Sciences, and associate vice chancellor for academic affairs, has been appointed to consider nominations to honor faculty members recently received in 1999 "Building on Your Vision" Design Awards from the American Institute of Architects-St. Louis and the Construction Products Council.

The annual awards recognize outstanding achievement in design and construction, while increasing awareness of excellence in these fields in the greater St. Louis region. The "Building on Your Vision" theme promotes the goals of "architects and craftsmen bringing their clients' dreams to reality — making the workplace more effective, homes more meaningful and civic spaces more connective.

Gia Daskalakis, assistant professor and director of the school's undergraduate program, received an Unbuilt Honor Award for the Hispanic Information & Telecommunications Network Inc. facility at the Brooklyn Navy Yard. N.Y. The proposal was recognized for "nourishing an old warehouse into a showcase for the aspirations of the Hispanic community without the typical starched dignity." Adam Glaser, affiliate assistant professor, received an Unbuilt Honorable Mention for the Corin Blondeau & Street Furniture International Design Competition in Osaka, Japan. The jurors noted that in the competition entry, "each piece has a sophisticated response to scale of the user. It is a beautiful and innovative interaction of industrial design and urban design.

Jan Hoal, associate professor and director of the school's Master of Architecture and Urban Design Program, received a Citation for the "restoration of the Governor House on Grand Basin in St. Louis' Forest Park. The jurors said that "this restoration of the public access and focus at the Grand Basin will be a tremendous asset for citi-zens."
A breath of fresh air for asthma research

By LINDA SAGE

Washington University in St. Louis

Michael Holtzman, M.D., has made critical discoveries in asthma's causes and treatment

Michael J. Holtzman, M.D. (right), and colleague Michael Walter, M.D., compare data from studies of isolated airway epithelial cells, genetically modified mice and human subjects, under the watchful eye of his gorilla "masoch."

Michael Holtzman studied biology because all of his friends were pre-med. He went to medical school because his alternative was Vietnam. And he became an asthma researcher because he was assigned to that topic.

But medical research turned out to be his forte. In 1983, he established a link between inflammation and asthma. In recent years, he has uncovered a possible mechanism. Research, he said, is tailor-made for him. "Enjoying coming up with a way of approaching a problem that is quite different, contrary even, to what has already been done," he said.

Michael J. Holtzman, M.D., is the Selma and Herman Seldin Professor of Medicine and a professor of cell biology and physiology. He also directs the Division of Pulmonary, Critical Care Medicine, whose clinical arm is near the Jewish Hospital nursery where he spent the first few days of his life.

Specialty by default

Medicine didn't loom large during the rest of Holtzman's childhood in St. Louis. Working on the school newspaper was his major passion at Horton Watkins High School in Ladue. But most of his friends at Northwestern University wanted to be physicians, so he majored in biology in 1973. He then moved from Evanston to Chicago's North Shore for medical school. Because he ruled out surgery — too much standing around in confined spaces — and pediatrics, psychiatry and obstetrics, he specialized in internal medicine by default.

The urge for a career in science surfaced after an internship and first year of residency at Duke University, when Holtzman abandoned ship for a research fellowship at the University of California at San Francisco (UCSF). Between trips to the beach, he studied airway function in healthy humans, trying to marry asthma and people with allergies. He then completed his UCSF fellowship and stayed at UCSF for seven more years.

In 1983, three years after he had set up his own lab, Holtzman published a paper that changed ideas about the causes of asthma. Studying the effects of air pollution in an animal model, he discovered that exposure to levels of ozone similar to those in Los Angeles provoked both inflammation and an asthma-like condition. Drugs that inhibited inflammation prevented the animals from developing symptoms. "Incredibly as it may seem, the words 'asthma' and 'inflammation' were not used at that time," Holtzman said. The work, also suggested that cells that line the airway — epithelial cells — are accomplices in this inflammatory response, an idea that Holtzman is still exploring.

"Dr. Holtzman has set the direction of asthma research for the past two decades," said James R. Shelley, M.D., associate professor of medicine at Vanderbilt University in Nashville, Tenn. "This concept led to crucial changes in the therapy of asthma and in the way research in airway disease is conducted." By the time Holtzman moved to Washington University in 1987, he was studying the effects of lipids, such as prostaglandins, on cultured epithelial cells. But he later switched his focus to cell adhesion molecules, which were thought to be important for activating immune cells. By 1990, he and his former fellow, Dwight Look, M.D., now an assistant professor of medicine, had evidence that a protein called ICAM-1 (intercellular adhesion molecule-1) plays a major role. Leading the replication of its gene, the Holtzman lab uncovered an entire genetic network that becomes active when airway cells defend the body against viral infection. "This is the first modern molecular techniques has provided us with a whole understanding of airway inflammation," Sheller said.

Earlier this year, Holtzman and former graduate student Deepak Sampath, Ph.D., reported that this generic program might contribute to asthma by operating even in the absence of infection, unnecessarily summoning inflammation to the airway. The group now is trying to create mouse models whose airway epithelial cells — but not other cells — lack key genes in the defense pathway. If such mice are resistant to asthma, Holtzman's idea should gain support. The researchers also have uncovered possible asthma therapies, such as a modified respiratory virus, that could switch off the pathway without decreasing the risk of infection. Holtzman has conducted much of this research while directing the Pulmonary and Critical Care Medicine division, a position he assumed in 1992. "Mike Holtzman is a very talented administrator who is smart, hardworking, well-organized and a visionary — an impressive combination," said John P. Atkinson, M.D., who chaired the Department of Medicine from 1992 to 1996 and now is the Samuel B. Grant Professor of Medicine. "He has developed this program from being a very good pulmonary division to being one of the top programs for the country's best." Later this year, the division will open a one-stop outpatient Lung Center for pulmonary and critical care, allergy and thoracic surgery.

"All of the staff — physicians, nurses, therapists, technicians and business staff — will be in the same place, which also will house patient charts, testing equipment and rehab facilities," Holtzman said. "This center will be patient-friendly and physician-friendly."

Since 1998, Holtzman also has been editor-in-chief of the prestigious American Journal of Respiratory Cell and Molecular Biology, published by the American Thoracic Society. He is responsible for identifying the right reviewer for each article and for seeing that papers are judged only on scientific merit. He also has created a new commentary section. "One of the opportunities was to bridge the gap between clinicians and basic scientists by explaining what scientific discoveries mean at the bedside," he said.

New perspective

At one time, academic activities completely filled Holtzman's life. But in 1988, he noticed an attractive manager in the first-year department of Biology at the St. Louis Galleria. The next day, he and his newly married wife, Jane, who has a 5-year-old son and a daughter who will be 2 at Thanksgiving. "A hospital career tends to be self-absorbing," Holtzman said. "But if you have children, you realize that else is more important. It gave me a new perspective on the way I viewed other people, I had to be a father at work as well as at home." I. Jerome Fiance, M.D., a clinical professor of medicine and the pulmonary division's spiritual leader for more than 50 years, has been an important role model and kind of a father figure. Holtzman's wife, Jane, also imparts the attitudes I try to adopt: dedication to the institution and a general level of fairness," Holtzman said.

Michael J. Holtzman, M.D.

Born in St. Louis

Education Northwestern University, B.A.; Northwestern University School of Medicine, M.D.

University positions Director of pulmonary and critical care medicine, the Selma and Herman Seldin Professor of Medicine, professor of cell biology and physiology

Family Wife, Jane Holtzman; son, Andrew, 6; daughter, Abigail, 2

Hobbies Family fun

M advertisement

This article was originally published in the St. Louis Post-Dispatch on November 23, 2002. It includes quotes and information about Michael Holtzman's career and research in asthma. Holtzman's work has contributed to a better understanding of asthma's causes and treatment, and he has been recognized for his contributions to the field. The article highlights his research on the role of inflammation in asthma and his work with epithelial cells in the airway. Holtzman's research has led to the development of new therapies for asthma, and he has been involved in the expansion of the Pulmonary and Critical Care Medicine division at Washington University in St. Louis. The article also notes Holtzman's role as editor-in-chief of the American Journal of Respiratory Cell and Molecular Biology, and his commitment to patient-friendly and physician-friendly care.