Paying the price

Woman economically penalized for having children, Ozawa says

A more women join the labor force — about a million a year since 1990 — the economic trade-off between career and children is becoming increasingly important. To see what price women pay for combining children and a career, Martha N. Ozawa, Ph.D., the Bertie Bofinger Brown Professor of Social Policy, examined the earnings' history of some 700,000 American women. Her finding: The more children a woman has, particularly a white woman, the less she'll earn over the course of her lifetime.

"The bottom line," says Ozawa, "is that women, not men, are economically penalized for having children."

While Ozawa's research found that children have a negative effect on a woman's lifetime earnings, her study also found that education has a positive effect, particularly for a black woman. In fact, her study found that a college-educated black woman's lifetime earnings, her study also found, would be 10 percent more than her white counterpart.

Ozawa, an expert on income maintenance and other economic concerns of women, will report her findings in an upcoming issue of Social Work Research & Abstracts. The study is titled "The Effects of Children and Education on Women's Earnings" History. Ozawa's research traced the working lives of all American women who had ever been married and who had retired between mid-1980 and mid-1981. Her detailed investigation was possible because the Social Security Administration, for the first time in its history, made public in 1990 information regarding the annual earnings of workers receiving Social Security.

"Breakthrough issue"

Ozawa argues that before women can earn equal pay for equal work, the effect of children on women's earnings must be neutralized. "It's the ultimate breakthrough issue women face in overcoming pay disparity," she says. Traditionally, economists have ignored the effect of children on women's earnings because childrearing and working outside the home were both considered matters of choice. But choice is no longer a factor in most women's decision to work outside the home. Ozawa points out that income from wives' earnings allows some eight million American families to stay above the poverty line, and that without these earnings, the poverty rate of American families would double.

One reason women with children earn less is because they take time out to have children at a time when men and childless women are investing heavily in their careers. "It's not the income loss during leaves," says Ozawa. "It's the fact that all happens at such a crucial time. Other workers are increasing their per-hour wages, getting job training and generally improving themselves, career-wise."

Ozawa found that the average annual earnings of women 10 percent more than her white counterpart.

Do neutrinos have mass? Scientists move closer to answer

A multidisciplinary team of Washington University researchers has shed light on what may be the hottest question in physics today: Do neutrinos have mass? In a study of the elements that determined the decay lifetimes of two of its isotopes, the researchers give theoretical one of the most stringent limits yet on the mass of the electron neutrino produced in the decay. At the same time, they have broken the record for the longest radioactive lifetime ever measured.

Thomas Bernatowicz, Ph.D., research associate professor of physics, and Ramanath Cowsik, Ph.D., distinguished visiting professor of physics, led the team of six, which included researchers from the University's Department of Physics and Department of Earth and Planetary Sciences. The researchers, all members of the Wysession receives five-year, $500,000 Packard fellowship

Continued on page 5

In this Issue...

Medical Update: PSA Density may be a valuable tool in helping determine how aggressively to re-biopsy for prostate cancer

Washington People: Viktor Hamburger, Ph.D., Edward Mallinckrodt Distinguished Professor Emeritus of biology

In the news: More than 120 faculty members receive promotions
Prostate cancer formula assesses need for repeated biopsies

Researchers at the School of Medicine have developed a formula designed to boost the diagnostic power of the PSA blood test, the most sensitive screening tool available for prostate cancer. The "PSA Density" may help physicians decide how aggressively to treat biopsy-negative men who show up in diagnostic limbo — men whose PSA tests identify them as cancer candidates but whose biopsies do not detect cancer.

PSA Density indicates the likelihood that a negative biopsy actually missed a cancer. It promises to be a valuable tool in preventing unnecessary follow-up biopsies, the researchers say. Their work was presented at the 1992 annual meeting of the American Urological Association, held last May in Washington, D.C. The investigators are preparing to submit their data for publication.

The test measures the PSA value adjacent to a density of prostate-specific antigen (PSA), produced only in the walnut-shaped prostate gland. PSA is a component of semen that thins the liquid to help sperm swim through it. Above-normal levels are an indication of prostate disease, says principal investigator Gerald L. Andriole, M.D., associate professor of urologic surgery at the School of Medicine.

PSA can be elevated for reasons other than cancer. The test can fail to detect cancer because it is limited to testing only a tiny portion of the organ suspected to be in trouble, he says. They recommend biopsies for patients with PSA values of four micrograms per liter or higher, Andriole says.

"If PSA levels are elevated, we often recommend having a prostate gland biopsy," Andriole says. "What we find is that two-thirds of the biopsies do not show cancer. That can be a big source of distress: Is the patient really cancer-free, or did we just miss it?"

Inability to detect cancers can fail to detect cancer because they are limited to testing only a tiny portion of the organ suspected to be in trouble, he explained. "As a sample is removed from the organ, magnified and examined for the presence of malignant cells, that sample does not always reflect the health of the whole organ. If the cancer is very small and the prostate is very large, it's easy to imagine that the needle might not find the cancer," he said.

Because of the possibility of undetected cancer, some men are caught in an unpleasant cycle; they must repeat the uncomfortable biopsy procedure every six months as long as their PSA levels remain high. Some have as many as six over time, Andriole says. He and his colleagues developed PSA Density to try to break this cycle. PSA Density relates a man's PSA blood level to the size of his prostate. Because PSA is produced by the epithelial cells that line the prostate gland, a larger prostate is likely to produce a higher amount of the protein. The logic behind PSA Density is that a high PSA value produced by a large prostate should be less worrisome than the same PSA value coming from a small prostate, Andriole says. Density is determined by dividing the serum PSA level by the size of the man's prostate. For example, if serum PSA is six and the prostate size is 100 cubic centimeters, the PSA Density is .06.

Andriole and his colleagues studied 302 men with persistently elevated PSA levels who had biopsies every six months. They found that of the men with a density greater than .15, half (49 out of 99) were found to have cancer. Of the men with a density between .1 and .15, about 20 percent (20 of 99) had cancer; only 14 percent of men with a density less than .1 had cancer (15 of 106).

The PSA serum levels for men diagnosed with cancer were not significantly different from levels of men without cancer, Andriole said. The PSA Density is what sets the patients apart. "The appropriate follow-up of men with persistently elevated PSA levels whose biopsies are negative is a common clinical concern," says Andriole. "These data suggest that PSA Density may be a valuable tool in helping to determine how aggressively to re-biopsy."

For example, if density is low, a physician might have the patient wait a year or two for another biopsy, Andriole says. But a higher density warrants closer attention. Currently, Andriole recommends that patients with densities of .15 or more repeat their biopsies in six months. In addition to helping physicians, the PSA Density can alleviate worry, cost, discomfort and inconvenience for the patient, he adds.

Strikes one in 11 men

Prostate cancer kills 34,000 American men a year, second only to lung cancer. The American Cancer Society estimates that one in 11 men will develop the disease; 132,000 new cases are diagnosed every year. Although there are warning signs such as difficult, painful or frequent urination, a large percentage of men do not experience symptoms at all. The risk begins at age 50.

Yvette Brown, left, registered medical assistant, takes a blood sample from Randall Meseay to conduct a PSA test.
that has always impressed Viktor Hamburger’s friends and co-workers is not the 92-year-old’s ground-breaking work in experimental embryology, his stature as an educator, or even the Nobel Prize which he was awarded in 1935 for his work on embryonic development. Instead, the subject are simply, “Most of my American colleagues think I should have received it (the Nobel Prize), but I have never lost sleep over it. I know exactly what I contributed.”

...Hamburger says his goal was to “describe what questions were raised early on and tell how they were answered, to state what I contributed.”...
Lectures

Thursday, Oct. 29


Noon. Molecular Biology and Pharmacology Seminar with Joseph Fenderson, MD., PhD., WU Dept. of Molecular Biology and Pharmacology. Room 3907 South Bldg.


4 p.m. Division of Biomedical and Biological Sciences Student-organized Seminar, "The Biochemical and Cellular Basis of Protein Antigens Recognized by the Immune System," Emil Urman, Edward Mallinckrodt Professor and head, WU Dept. of Pathology, Erlanger Aud., McDonnell Bldg.


Friday, Oct. 30

8 a.m. Dept. of Pathology and Laboratory Medicine Special Seminar, "A Rational Method for the Identification of Antibodies in Clinical Specimens," Joseph Fenderson, PhD., Tina Cudworth, MD., Jeffrey Woodruff, PhD., Jon Halpern, MD., WU School of Medicine; medical director, Therapy Services; St. Louis Children's Hospital. Room 102 Wilson Hall.

9:15 a.m. Pediatric Grand Rounds Seminar, "Neurological Care of Physical Disability: Rational Approaches for Improving Outcomes," Michael Noetzel, assoc., prof., departments of pediatrics and neurology, WU School of Medicine; medical director, Therapy Services; St. Louis Children's Hospital. Room 102 Wilson Hall.

10:15 a.m. Lab Safety Workshop, "Working with the Hazards of Radioisotopes: Practical Tips," Jonathan Silver, ALS, WU School of Medicine.


 Noon. Dept. of Cell Biology and Physiology Seminar, "Replication Initiation and Termination in Eukaryotes," Douglas Dean, ass. prof., WU Dept. of Biology, Room 322 Rebstock Hall.


2 p.m. WU Alumni Association Lecture Series, "Lindbergh's Historic Flight to Paris," by WU alum and author, Lincoln Williams, who has appeared for the National Geographic Society's lecture series for more than 20 years (also shown at 8:30 p.m.). Cost: $4 at the door. Gibson Chapel.

6 p.m. WU Association Travel Lecture Series, "Industrialization and Development," by Sir Hugh Dyson, and "The Quest for a Sustainable Future," by WU lecturer Richard Blewitt, who has appeared for the National Geographic Society's lecture series for more than 20 years (also shown at 8:30 p.m.). Cost: $4 at the door. Gibson Chapel.

Monday, Nov. 2


4 p.m. Graduate Program in Immunology Seminar, "Organ Specialization in Immunity," Thomas Ferguson, ass. prof., WU Dept. of Ophthalmology Third Floor Aud., Children's Hospital.

8 p.m. School of Architecture Monday Night Lecture Series, "The Lessons of the Berlin Wall and the Fall of the Berlin Wall," Peter Blake, artist and educator. WU visiting prof., Steinberg Hall.

Tuesday, Nov. 3

12:15 p.m. Program in Physical Therapy Brown Bag Research Seminar, "How the Brain Controls the Fingers," Marc Scheiner, PhD., WU Dept. of Neuroscience; Steven J. Rose Conference Room, Third Floor, East Building.

Wednesday, Nov. 4


8 a.m. Dept. of English Poetry Reading by Deborah Gregor, Visiting Hurst Professor. Hunt Lounge, Room 201 Duncker Hall.

Thursday, Nov. 6


4 p.m. Assembly Series Holocaust Memorial Lecture, "The Selections From the Gift of Mr. and Mrs. Edward McGlynn Gaffney, dean, Valpariso University.

Friday, Nov. 6

4 p.m. Performing Arts Dept. presents "You Like It" by William Shakespeare (also, "Paintings from the National Gallery" by Sir Hugh Dyson). Lecture Hall.

4 p.m. Graduate Program in Immunology Seminar, "Replication Initiative and Termination in Eukaryotes," Douglas Dean, ass. prof., WU Dept. of Biology, Room 322 Rebstock Hall.

Monday, Nov. 9

4 p.m. Dept. of Immunology, U. of Washington School of Medicine; Howard Hughes Medical Institute; Seattle. Carl V. Moore Aud., 4500 East Westmark.

Monday, Nov. 16

4 p.m. Dept. of Immunology, U. of Washington School of Medicine; Howard Hughes Medical Institute; Seattle. Carl V. Moore Aud., 4500 East Westmark.

Monday, Nov. 23

As You Like It, one of William Shakespeare's most frequently performed plays will be presented by the Performing Arts Department at 8 p.m. Nov. 6, 7, 13 and 14 and at 2 p.m. Nov. 8 and 15 in Edison Theatre. In conjunction with the performances, a debate concerning the true authorship of Shakespeare's plays will be held at 7:30 p.m. Nov. 12 in Edison Theatre. The play, which is a comedy, celebrates love, friendship and the freedom found in nature.

Shakespeare play celebrates love, friendship and freedom in nature

A survivor of both Auschwitz and Buchenwald concentration camps, he devotes his life to speaking out against human brutality. His efforts have earned him the U.S. Congressional Gold Medal of Achievement, the Medal of Liberty Award and the 1986 Nobel Peace Prize. In addition to academic and professional honors, he has received more than 100 other awards.

Wiesel's more than 30 books have won numerous awards, including the Prix Medicis for A Beggar in Jerusalem; the Prix Littéraire Inter for The Testament; and the Grand Prix for Literature from the City of Paris for The Fifth Son. His first book, Night, an account of his experience during the Holocaust, became a worldwide best seller translated into 18 languages. His latest book, The Forgotten, was published this year.

A native of Sighet, Transylvania, Wiesel and his family were deported by the Nazis to Auschwitz when he was 15 years old. After the war, he became a journalist and writer in Paris.

The lecture is co-sponsored by the Assembly Series, Jewish and Near Eastern Studies Program, Religious Studies Program and Performing Arts Department. For more information, call 935-4620.

Nobel Prize winner Elie Wiesel to deliver Holocaust lecture

Elie Wiesel, winner of the 1986 Nobel Peace Prize, will deliver the Holocaust Memorial/abbie Ferdinard M. Isserman Memorial Lecture at 4 p.m. Thursday, Nov. 5, in Graham Chapel. His talk, "When the Unthinkable Happens," is part of the University's Assembly Series. Seating for the lecture will be reserved for students and other members of the Washington University community with current identification until 4 p.m.

Wiesel, who has been at Boston University since 1976, is the Andrew Melton Professor in the Humanities and a member of the departments of religion and philosophy. In 1982 he was Henry Luce Visiting Scholar in the Humanities and Social Thought at Yale University. He received the U.S. Congressional Gold Medal of Achievement, the Medal of Liberty Award and the 1986 Nobel Peace Prize. In addition to academic and professional honors, he has received more than 100 other awards.

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Faculty receive promotions

T he following faculty received promotion or appointment, unless otherwise noted. The faculty with an asterisk next to their names were put on leave with tenure. (Note: The next issue of the Record will contain a list of the faculty members who have been granted tenure as well as faculty members on the Hilltop and Medical School campuses.)

Hilltop Campus

*Asian-American 종族 to associate professor of social work; Lois Beck to professor of anthropology; Pedro Cavallaro to adjunct professor of anthropology; William H. Dieckhoff to associate professor of physics; *Eun E. Exum to professor of anthropology; Edwin B. Fisher Jr. to professor of psychology (also psychology in medicine); *Diana A. Johnson to associate professor of medicine; *Richard J. Lazarus to professor of law; *Marvin H. Marcus to associate professor of Japanese language and literature; *Angela Miller to assistant professor of art history; Michael I. Miller to professor of ethnography; *E. Michael Olszewski to associate professor of economics; *Michael C. Ogilvie to associate professor of physics; *Enos P. Price to associate professor of theatre; *Michael Sheberg to associate professor of history; *Gisela S. Shiraishi to associate professor of English; *Peter Hwang to associate professor of Arabic language and literature; Bamim Kharmouzi to associate professor of computer science; *Allan Larson to associate professor of biology; *Scott A. Litman to professor of psychiatry; *Benico Barzilai to associate professor of pediatrics; *Charles V. Rozelle to associate professor of medicine; *Denis I. Airman to assistant professor of neurology and assistant professor of pediatrics; *V. Michael Holers to associate professor of medicine; Nancy E. Holmes to associate professor of clinical pediatrics; William E. Hopkins to associate professor of medicine; *Philip C. Huettner to assistant professor of pediatrics; *Yuko Ida Kimura to research assistant professor of otolaryngology; *Elizabeth Hilliker to assistant professor of radiology; *John W. Newcomer to assistant professor of clinical pediatrics; *Lawrence G. Lenke to associate professor of social work; *Lutz K. Lenk to associate professor of pediatrics; *Mary E. Mcbride to associate professor of medicine; *Bruce D. Lindsay to associate professor of medicine; *Kenneth L. Lashley to associate professor of pediatrics; *Patrick J. Lustman to associate professor of medicine; *Ann M. MacKay to assistant professor of radiology; *Joseph J. Mackey to assistant professor of psychiatry; *Michael J. Strube to professor of psychology; and *Robert K. Weeniger to associate professor of pediatrics.

School of Medicine

Elliot E. Abbey to associate professor of medicine; Dana R. Abendstern to research associate professor of cell biology; *Robert H. Deusinger to assistant professor of clinical pediatrics (promoted Oct. 1, 1991); *Peeter Hwang to associate professor of Arabic language and literature; *Michael I. Miller to professor of ethnography; *Diana A. Johnson to associate professor of economics; *Michael C. Ogilvie to associate professor of physics; *Enos P. Price to associate professor of theatre; *Michael Sheberg to associate professor of history; *Gisela S. Shiraishi to associate professor of English; *Peter Hwang to associate professor of Arabic language and literature; Bamim Kharmouzi to associate professor of computer science; *Allan Larson to associate professor of biology; *Scott A. Litman to professor of psychiatry; *Benico Barzilai to associate professor of pediatrics; *Charles V. Rozelle to associate professor of medicine; *Denis I. Airman to assistant professor of neurology and assistant professor of pediatrics; *V. Michael Holers to associate professor of medicine; Nancy E. Holmes to associate professor of clinical pediatrics; William E. Hopkins to associate professor of medicine; *Philip C. Huettner to assistant professor of pediatrics; *Yuko Ida Kimura to research assistant professor of otolaryngology; *Elizabeth Hilliker to assistant professor of radiology; *John W. Newcomer to assistant professor of clinical pediatrics; *Lawrence G. Lenke to associate professor of social work; *Lutz K. Lenk to associate professor of pediatrics; *Mary E. Mcbride to associate professor of medicine; *Bruce D. Lindsay to associate professor of medicine; *Kenneth L. Lashley to associate professor of pediatrics; *Patrick J. Lustman to associate professor of medicine; *Ann M. MacKay to assistant professor of radiology; *Michael J. Strube to professor of psychology; and *Robert K. Weeniger to associate professor of pediatrics.

*Marie H. Marcus to associate professor of Japanese language and literature; *Angela Miller to assistant professor of art history; Michael I. Miller to professor of ethnography; *E. Michael Olszewski to associate professor of economics; *Michael C. Ogilvie to associate professor of physics; *Enos P. Price to associate professor of theatre; *Michael Sheberg to associate professor of history; *Gisela S. Shiraishi to associate professor of English; *Peter Hwang to associate professor of Arabic language and literature; Bamim Kharmouzi to associate professor of computer science; *Allan Larson to associate professor of biology; *Scott A. Litman to professor of psychiatry; *Benico Barzilai to associate professor of pediatrics; *Charles V. Rozelle to associate professor of medicine; *Denis I. Airman to assistant professor of neurology and assistant professor of pediatrics; *V. Michael Holers to associate professor of medicine; Nancy E. Holmes to associate professor of clinical pediatrics; William E. Hopkins to associate professor of medicine; *Philip C. Huettner to assistant professor of pediatrics; *Yuko Ida Kimura to research assistant professor of otolaryngology; *Elizabeth Hilliker to assistant professor of radiology; *John W. Newcomer to assistant professor of clinical pediatrics; *Lawrence G. Lenke to associate professor of social work; *Lutz K. Lenk to associate professor of pediatrics; *Mary E. Mcbride to associate professor of medicine; *Bruce D. Lindsay to associate professor of medicine; *Kenneth L. Lashley to associate professor of pediatrics; *Patrick J. Lustman to associate professor of medicine; *Ann M. MacKay to assistant professor of radiology; *Michael J. Strube to professor of psychology; and *Robert K. Weeniger to associate professor of pediatrics.
On assignment

Harry L.S.Knopf, M.D., associate profes- sor of clinical ophthalmology, is a visiting faculty member for ORBIS International’s teaching program in Kunming, China. ORBIS International is a humanitarian, non-political organization dedicated to the prevention of preventable blindness worldwide through education. Knopf lectured on techniques and complications of modern extracapsular cataract extraction with insertion and implantation of prosthetic intraocular lenses. In addition, he demonstrated these techniques by performing live, televised surgery aboard the ORBIS airplane.

David J. Pittman, Ph.D., professor of psychology, has been elected chair of the newly formed alcohol and drugs section of the American Sociological Association. He also presented an invited paper on “Claims-Making for Alcohol Enterprise” at the Society for the Study of Social Problems’ annual meetings in Potsdam.

The American Society for Cell Biology has elected Philip D. Stahl, Ph.D., Edward Mallinckrodt Jr. Professor and head of the Department of Cell Biology and Physiology, to its council.

Guidelines for submitting copy:

Send your full name, complete title, department, phone number, highest earned degree, along with a typed description of your notoriety activity to For The Record Box 700. Items must not exceed 75 words. For more information, call 855-2125.
Neutrinology mass is venture into new physics — from page 1

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Neutrino mass is venture into new physics