



CIRWH NEWS FLASH

Center for Interdisciplinary Research in Women's Health

WINTER 2003

THE UNIVERSITY OF TEXAS MEDICAL BRANCH

VOLUME 1, NUMBER 4

From the Director's Desk



A key goal of the Center for Interdisciplinary Research in Women's Health is to initiate women's health research collaborations, not only among UTMB

investigators, but also with those at other institutions.

The most effective means to that end is the CIRWH seminar series. Rather than weekly presentations by center fellows on campus, the 2003–2004 seminars are scheduled primarily on the first Friday of each month and focus largely on research by our neighbors in the Texas Medical Center.

Our first speaker, Dr. Suzanne A.W. Fuqua of Baylor University College of Medicine, spoke to one of our largest audiences to date—nearly 55—about her research on the role of estrogen receptors alpha and beta in breast cancer. In the same vein, Dr. Daniel Medina, one of Fuqua's colleagues at Baylor, will present "Hormone-mediated prevention and hormone dependence of pre-malignant mammary progression," at the Feb. 6 seminar.

In between, two of UTMB's newest faculty members, Drs. D. Mark Estes and Edward M. Curran, present the Dec. 5 seminar on "The impact of estrogen receptor signaling on immunity to infection and cancer." All of these seminar speakers take different approaches to the same goal of eradicating breast cancer.

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Dr. Susan Weller, right, talks with Dr. Martha Hargrave after Weller's CIRWH seminar presentation in October.

Study finds diabetes risk highest after gestational diabetes

Women who experienced gestational diabetes are 15 times more likely to develop diabetes mellitus than are women who have not had gestational diabetes, according to a study recently published in the Proceedings of the National Academy of Sciences, and written by UTMB researchers.

After diabetes has been detected during pregnancy, the study found that many of these women go on to have diabetes within the next several years.

Detecting and treating diabetes is important because it is a major national health problem, costing the United States nearly \$132 billion in medical costs and lost productivity in 2002 alone. Of the 17 million Americans with diabetes, more than one

third—or 5.9 million—do not know that they have it, according to the American Diabetes Association.

The study, conducted by Dr. Susan C. Weller, professor of preventive medicine and community health at UTMB, and Florence J. Dallo, graduate student and assistant in Weller's lab, examined the efficacy of the 2002 screening guidelines from the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. The guidelines recommend screening every three years, beginning at age 45, and earlier or more frequently for those with at least one other risk factor.

Risk factors include older age, low levels of high density lipoproteins, high triglycerides, being overweight

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Three types of diabetes

Diabetes is a disease marked by the body's inability to produce and properly use insulin, the key hormone in converting sugar, starches and other foods into energy. Left untreated, diabetes carries an increased risk of blindness, kidney disease, heart disease and amputations.

Three major types of diabetes afflict some 17 million people in the United States, according to the American Diabetes Association (ADA).

In Type 1 diabetes, also known as juvenile diabetes, the body does not make insulin. Some 5 to 10 percent of Americans diagnosed with diabetes have this form of the disease.

Type 2 diabetes results when the body becomes resistant to insulin and cannot produce enough of it to process the food. It is the most common type, and affects 90 to 95 percent of diabetics, or about 16 million Americans.

The third type is gestational diabetes, which causes high blood sugar levels in about 4 percent of pregnant women in this country. About 195,000 cases are diagnosed each year.

Diabetes risk highest after gestational diabetes

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(BMI > 25), a first-degree relative with diabetes, minority ethnicity and high blood pressure.

Weller has been on the faculty at UTMB since 1988. Dallo is working on her Ph.D. in the Graduate School of Biomedical Science. She shares with Weller an interest in diabetes and has been affiliated with her since beginning graduate studies.

Diabetes mellitus, marked by high blood sugar, is one of the leading causes of death in the United States. It also is the leading cause of new cases of blindness, end-stage kidney disease and amputations of lower extremities.

Using a national sample provided by the U.S. National Health and Nutritional Examination Survey, a database maintained by the Centers for Disease Control and Prevention, Dallo and Weller found that the proposed screening guidelines would detect almost all new cases of diabetes, if the guidelines were followed.

Older age is one of the strongest risk factors in detecting new cases of the disease. Undiagnosed diabetes occurs 5.8 times more often in adults past age 45, the recommended age to begin screenings. The investigators, fellows in the Center for Interdisciplinary Research in Women's Health, found that Hispanics and African Americans, however, have an earlier age-of-onset than white non-Hispanics. Therefore, the authors suggest that initial screening for those populations should begin at age 30 and for whites at age 40.

Poor cholesterol readings are another strong risk factor. A low HDL level (below 35) or elevated triglycerides

Warning Signs of Diabetes

- Frequent thirst
- Increased urination
- Blurred vision
- Skin infections
- Slow wound healing
- Increased fatigue
- Increased hunger
- Weight loss for no reason

Source:
<http://www.stark-diabetes.org/>

The ADA also describes a condition known as pre-diabetes, which occurs when a person's blood glucose levels are higher than normal, but not high enough to be diagnosed as Type 2 diabetes. Pre-diabetes carries some of the same risks as full-blown type 2 disease. Pre-diabetes affects at least 16 million people in the United States,

in addition to the 17 million who have diabetes.

For detailed information about diabetes, educational programs, clinical trials, the latest research and up-to-date patient care suggestions, please go to the Stark Diabetes Center web site: <http://www.stark-diabetes.org/>.

Researcher Profile

Name: Susan C. Weller, Ph.D.

Title: Professor

Birthplace: USA

Education: Ph.D.

How long have you been at UTMB? Since 1988

What is the focus of your women's health research?

Focus right now is on diabetes.

What do you enjoy most about your work?

Finding answers to questions.

(above 250) mean a person is 4.1 times more likely to have undiagnosed diabetes.

Weight also puts a person at major risk for diabetes. "When all risk factors were considered," said Weller, "those with a body mass index higher than 25 were nearly three times more likely to have the disease. And, individuals whose BMI is above 30 carry 4.5 times the risk."

The authors caution that patients should be proactive about their diagnosis and treatment. "The hope is that better management would delay or prevent complications," Weller said. But she suspects doctors aren't screening their patients according to the guidelines because they're too busy. "We're asking physicians to do more in less time. This screening may not a priority for them, but it should be."

"Patient education should focus on reviewing their levels of risk, discussing diabetes and testing for diabetes," she said.

Honors and Awards

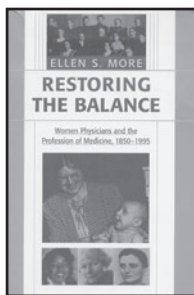
Dr. Elizabeth T. Anderson, professor and director of the WHO Collaborating Center for Nursing and Midwifery Development in Primary Health Care, received the "Helping Hands" Award from the Women's Resource and Crisis Center at its annual celebration July 24.

Dr. Abbey B. Berenson, professor of obstetrics and gynecology and chief of the Division of Pediatric and Adolescent Gynecology, took office in October as the first woman president of the Central Association of Obstetricians and Gynecologists. She has been on the board of directors since 1997 and was seated at the 1,000-member organization's annual meeting in LaJolla, Calif.

Dr. Anne Hudson Jones, professor of medical humanities, was named the first recipient of the Hobby Family Professorship in the Medical Humanities. The professorship was announced at UTMB's Founder's Day Faculty Awards Luncheon on Oct. 3.

Dr. Terumi Midoro-Horiuti, assistant professor, Department of Pediatrics, is UTMB's nominee for the Pew Scholars Program in the Biomedical Sciences for 2004. The program is intended to support young investigators of outstanding promise in basic and clinical sciences. Dr. Midoro-Horiuti's research proposal is: "Effect of Estrogens on Allergic Reactions."

Dr. Ellen More, professor of history of medicine and medical humanities, in the Institute for the Medical Humanities and the Department of Preventive Medicine and Community Health, received the History of Women in Science book prize from the History of Science Society for her book *Restoring the Balance: Women Physicians and the Profession of Medicine, 1850-1995* (Harvard, 1999; 2001).



Invited Presentations

Dr. Anderson, also a professor of nursing, was an invited speaker and consultant Nov. 10-14 at Yamaguchi University in Ube, Japan. She presented "Development of a Nursing Model" to a Japanese national organization of nurses, and nurses at the university health center. In September, Anderson was featured at several seminars and workshops at the University of Sao Paulo-Ribierao Preto, Brazil.

Dr. Ayman Al-Hendy, assistant professor in the Department of Obstetrics & Gynecology, is an invited speaker at the second international conference of the Department of Obstetrics & Gynecology at El-Minia University in Egypt. His topic for the March 4-5 session is "Prevention of Laparoscopic Complications."

Dr. Mabel Caban, assistant professor in the Division of Rehabilitation, Department of Orthopedics and Rehabilitation, will present study findings on "Upper body function, breast cancer treatment and emotional health in older women with breast cancer" at the San Juan Veteran Medical Center in December in San Juan, Puerto Rico.

Dr. Gordon Klein, professor in the Department of Pediatrics, presented a paper co-authored with **Dr. Roberto Garofalo**, also professor of pediatrics, entitled, "A Possible Role for Calcium in the Inflammatory Response," at the annual meeting of the American Society for Bone and Mineral Research in Minneapolis in September. In addition, Dr Klein chaired a session that he had organized the previous year. Participants outlined a research agenda for bone problems in children in order to prevent, as much as possible, the antecedents of osteoporosis in adulthood.

New Grants

Al-Hendy, Ayman, Obstetrics & Gynecology. Estrogen Dependency of Uterine Leiomyoma. National Institute of Child Health & Human Development. \$1,415,422.45/5 years.

Goodwin, James, Internal Medicine; **Eschbach, Karl**, Sealy Center on Aging; **Cutchin, Malcolm P.**, Rehabilitation Sciences SAHS; **Philips, Billy U.**, Preventive Medicine & Community Health-Epidemiology & Biostatistics; **Freeman, Daniel H.**, Biostatistics. UTMB Center for Population Health. National Cancer Institute. \$9,025,536.41/5 years.

Saade, George, Obstetrics & Gynecology. Scope and Causes of Stillbirth. National Institute of Child Health & Human Development. \$2,215,755.00/5 years.

Recent Publications



Anderson, E. T. & McFarlane, J. (2004).

Community as partner: Theory and practice in nursing. 4th Ed. Philadelphia: Lippincott Williams and Wilkins. (Each

of the first three editions won the *American Journal of Nursing* "Book of the Year" award.) The Japanese translation of the third edition was published this summer.

James S. Goodwin, Shiva Satish, Elizabeth T. Anderson, Ann B. Nattinger, and Jean L. Freeman. Effect of Nurse Case Management on the Treatment of Older Women with Breast Cancer. *Journal of the American Geriatric Society*, 51, 1252-1259.

T. Midoro-Horiuti, V. Mathra, C.H. Schein, W. Braun, S. Yu, M. Watanabe, J.C. Lee, E.G. Brooks, and R.M. Goldblum. Major linear IgE epitopes of mountain cedar pollen allergen Jun a 1 map to the pectate lyase catalytic site. *Molecular Immunology*. 40:555-62, 2003.

Short, M.B., Succop, P.A., Mills, L., **Stanberry, L.R.**, Biro, F. M., and **Rosenthal, S. L.** (2003). Non-exclusivity in adolescent girls' romantic relationships. *Sexually Transmitted Diseases*. 30:752-755.

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On Jan. 16, we welcome Dr. Ellen Gritz, professor and chair of the Department of Behavioral Science at UT M.D. Anderson Cancer Center. Her research focuses on smoking and cancer. Our April 2 presenter, Dr. Jan Blalock, works with Gritz and will talk about her research on a smoking cessation intervention to help pregnant smokers with mood management.

The center is fortunate to have such a stellar line-up—and so many opportunities for collaborations. We hope you will circle the dates on your calendar and plan to join us.

Yours in good health,



Abbey B. Berenson, M.D.

CIRWH Calendar

Women's Health Conferences

December

Dec. 9, **Boning Up on Osteoporosis: Emerging Therapies for Prevention and Treatment**, Bethesda, Md., sponsored by NIH; also being videocast at: <http://videocast.nih.gov>

Dec. 10–12, **Ninth Annual Maternal and Child Health Epidemiology Conference**, Tempe, Ariz.

Dec. 12–13, **Controversies in the Management of Gynecologic Malignancies**, Chicago, Ill., sponsored by Imedex

January

Jan. 10–13, **4th World Conference on Vaginitis**, Puntarenas, Costa Rica, sponsored by Imedex

February

Feb. 27–28, **International Conference on Women and Infectious Diseases**, Atlanta, Ga., Sponsored by: CDC's National Center for Infectious Diseases and the Office of Minority and Women's Health

March

Mar. 8–11, **National Sexually Transmitted Diseases Prevention Conference**, Philadelphia, Pa.

Mar. 12–14, **Fourth Annual North American Women's Healthcare Forum**, Anaheim, Calif., sponsored by the Foundation for Better Health Care

Mar. 17–20, **Second World Congress on Women's Mental Health**, Washington, D.C., sponsored by International Association for Women's Mental Health

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The CIRWH *News Flash* is published quarterly by the Center for Interdisciplinary Research in Women's Health at the University of Texas Medical Branch at Galveston.

The University of Texas Medical Branch

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in Women's Health

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