



Women's Health Research at Yale News Release YALE UNIVERSITY SCHOOL OF MEDICINE

Contact: Daniel P. Jones, Press Officer/Science Writer (203) 764-6600 FAX (203) 764-6609

Women's Health Research at Yale's 2011 Pilot Grants Target Breast Cancer, Obesity

New Haven, Conn. – Targeting fundamentally important areas of women's health, two new Pilot Project Program grants from *Women's Health Research at Yale* will focus on breast cancer, the second leading cause of cancer mortality among women, and obesity, which preferentially leads to higher rates in women of serious secondary health problems including diabetes and heart disease.

“As with all of the studies we have funded, the investigations by this year's awardees focus on some of the most relevant health concerns that women face. Just as importantly, these investigations will continue our Program's longstanding practice of generating new scientific knowledge with the aim of providing practical benefits to improve the well-being of women,” said Carolyn M. Mazure, Ph.D., Director of *Women's Health Research at Yale*.

The 2011 *Women's Health Research at Yale* pilot grant recipients are:

- **Anthony J. Koleske**, Ph.D., Associate Professor of Molecular Biophysics and Biochemistry, and **Titus J. Boggon**, Ph.D., Assistant Professor of Pharmacology. This interdisciplinary study, co-funded by Yale Cancer Center, will take initial steps toward developing medications to treat metastasis, the spread of breast cancer, as metastasis is the primary cause of mortality from this disease. The collaborators plan to identify small molecule compounds that disrupt the interaction of three proteins which form a control “switch” in breast cancer cells. When turned on, this switch enables breast cancer cells to invade surrounding tissues and form secondary tumors. Identifying compounds that disrupt the formation of this switch will be a first step toward generating a new class of drugs to limit the spread of breast cancer cells. Currently, no drugs selectively target breast cancer metastasis. Koleske and Boggon envision developing these drugs for use after surgical removal of primary tumors, with the aim of improving long-term survival outcomes.
- **Matthew S. Rodeheffer**, Ph.D., Assistant Professor of Comparative Medicine, and of Molecular, Cellular and Developmental Biology. Dr. Rodeheffer's study is designed to understand the cell mechanisms that control white adipose tissue mass in women at the onset of diet-induced obesity. Determining these mechanisms is highly relevant to everyone's health, but particularly important to women because women suffer greater obesity-related health consequences, including diabetes and heart disease. Recently, rates of obesity among U.S. women aged 20-34 years old have been increasing more rapidly than in any other age group for women or men. Whereas most previous studies of how fat deposits are regulated at the cellular level have used male animal models and inferred results for females, this study will use female animal models. Thus, this investigation has the potential to begin development of gender-specific therapies for the treatment of obesity and significantly alter the assessment of risk of developing obesity-related health problems.

With original funding from The Patrick and Catherine Weldon Donaghue Medical Research Foundation, *Women's Health Research at Yale* was founded in 1998 to address historic gender disparities in medical research by initiating and supporting innovative studies on women's health and gender differences in health. Since inception, *Women's Health Research at Yale* has awarded more than \$4 million in pilot grants to more than 60 Yale investigators who have generated nearly \$47 million in new external grants to further their research – an enormous “return on investment.”

WWW.YALEWHR.ORG