

ORWH FY 03 SUPPORTED SPECIAL PROJECTS

1.

TITLE: Specialized Centers of Research on Sex and Gender Factors Affecting Women's Health (SCORs) NIAMS
AWARD: ORWH - \$9.2 M
CONTACT: Charisse Lamar, M.D., M.P.H.

ORWH funded eleven Year II Specialized Centers of Research on Sex and Gender Factors Affecting Women's Health (SCORs) with co-funding by the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS), the National Institute of Child Health and Human Development (NICHD), The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), The National Institute on Drug Abuse (NIDA), the National Institute of Mental Health (NIMH), and the National Institute of Environmental Health Sciences (NIEHS) and the Food and Drug Administration (FDA.) These centers provide new opportunities for interdisciplinary approaches to advancing studies on how sex and gender factors affect women's health.

Each SCOR promotes interdisciplinary collaborations and development of a research agenda bridging basic and clinical research on sex/gender factors underlying a priority health issue. The SCOR program complements other Federally supported programs addressing women's health issues. This is the first time the ORWH took the lead in developing and funding a new research initiative relating to women's health. The multidisciplinary nature of the centers provide innovative approaches to advancing research on the role of sex and gender related health effects. The research scope of the SCOR's stems from three sources: the Institute of Medicine (IOM) report, "Exploring the Biological Contributions to Health Does Sex Matter?", "An Agenda for Research on Women's Health for the 21st Century", and from recommendations from the National Institutes of Health (NIH) Institutes and Centers. The multidisciplinary nature of these centers provide opportunities for innovative approaches to research on the role of sex- and gender-related health effects.

ORWH SCOR Activities FY03

Major activities relating to the Office of Research on Women's Health (ORWH) Specialized Centers of Research (SCORs) on Sex and Gender Factors Affecting Women's Health focused on planning the first annual Center Directors Meeting. The Center Directors Meeting will be held on November 6-7 2003. To facilitate meeting planning, the ORWH SCOR Coordinator, Dr. Charisse Lamar, initiated the Center Program Directors Working Group (CPDWG). This working group consists of program directors of the collaborating NIH offices and institutes (NIAMS, NIDDK, NIEHS, NICHD, NIDA, NIMH, the ORWH), and the FDA.

The working group recommended to the ORWH Director, Dr. Vivian Pinn, that a SCOR External Advisory Committee (EAC) be developed to provide guidance to the ORWH. Upon that recommendation, Dr. Pinn selected members of the ORWH Coordinating Committee on Research on Women's Health (CCRWH), as well as current and former member of the ORWH Advisory Committee to review the SCOR Program. The nine-member EAC will review supplemental reports, attend the first annual Directors Meeting, and submit a formal review of the Program to the ORWH in November 2003.

Guidelines were established by the CPDWG in preparation of the EAC's review. First, a format was outlined for the supplemental progress reports that were submitted by the SCOR Directors. Evaluation guidelines were later developed for the EAC. These guidelines will be used to assess individual SCORs on their ability to attain a multidisciplinary research team, and on their success in accomplishing research proposed in the grant application.

Two SCORs were visited in June 2003. Dr. Charisee Lamar visited the University of California at San Francisco, and the University of Pittsburgh SCORs. Program directors from the co-funding NIH institutes accompanied Dr. Lamar on both site visits.

Additional activities relating to the SCOR program included, logo development and designing the ORWH SCOR web page. Abstracts for the eleven Centers and the logo are located on the newly designed web page (<http://www.niams.nih.gov/rtac/funding/grants/scor/ORWHSCOR.htm>).

Annual progress reports were submitted by the SCORs, the primary institute program director will review them, and will provide a yearly report on the scientific progress of the grantee. The SCOR Coordinator has made several site visits and, with ORWH staff, arranged the first annual meeting of the principal investigators. Plans for the first PI meeting to be held November 6-7, 2003 are being finalized. An External Advisory Committee has been appointed to review the SCOR annual progress reports and Guidelines have been developed.

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TITLE: HPV 16 Virus-like Particles Vaccine Trials NCI
AWARD: \$600,000
CONTACT: Allen Hildesheim, Ph.D. and Doug Lowy, M.D., Division of Cancer
Epidemiology & Genetics

Cervical cancer is a leading cause of cancer death for women around the world, but now that research has revealed the role of the human papillomavirus (HPV) in the pathogenesis of this cancer, research is now making progress in ways to prevent cervical cancer. One such study has developed a virus-like particle (VLP) vaccine against HPVs with the long-term goal of preventing or eliminating cervical cancer through the prevention of the transmission of HPV. Clinical trials are being conducted to determine the effectiveness of this HPV VLP-based vaccine in preventing a persistent infection with HPVs. Early clinical trials of the vaccine have been completed indicating that they are well tolerated and highly immunogenic. A large-scale efficacy trial in Costa Rica to

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assess the ability of the vaccine is the next step in providing a vaccine that can have a global impact on women's cancers.

Safety and Immunogenicity (Phase I & II) trials, which have been generously supported by your office, are now completed and have demonstrated that the HPV16 VLP vaccine is well tolerated and induces strong immunological responses, and that these immune responses are observed systemically and at the genital tract of vaccinated women. Results from parallel Phase IIb trials conducted by Merck Pharmaceuticals and GlaxoSmithKline (GSK) Biologicals further indicate that HPV VLP-based vaccines protect against persistent type-specific viral infection. These results are highly encouraging and suggest that VLP-based vaccines are likely to provide protection against high-grade cervical neoplasia and cervical cancer.

To follow-up on these promising findings, we plan to conduct a 12,000-15,000 woman Phase III, randomized, pivotal trial to address the question of whether HPV VLP-based vaccination reduces the incidence of high-grade cervical neoplasia and cervical cancer and to further evaluate its safety profile. In addition, numerous other important objectives will be addressed in our Phase III trial, including evaluation of duration of protection, type-specificity of protection, and the impact of vaccination on rates of colposcopic referral and treatment.

As you know, while our efforts to set up the infrastructure for this Phase III trial in Costa Rica have progressed well, difficulties in obtaining sufficient GMP-grade vaccine have delayed trial initiation. To address this problem, we recently entered into a Clinical Trials Agreement (CTA) with GSK to use their HPV16/18 VLP vaccine in our Costa Rican trial. This new partnership has the advantage of allowing results from our trial in Costa Rica to be used directly to petition the FDA for licensure of a vaccine for widespread use, while allowing NCI to maintain autonomy in the conduct, analysis, and interpretation of the trial and its results.

Efforts are now underway to make the modifications necessary to our protocols and to our infrastructure in Costa Rica to allow us to use the GSK HPV16/18 VLP vaccine in a pivotal Phase III efficacy trial in Costa Rica. It is anticipated that a final protocol will be submitted to the FDA before the end of this year, and that the Costa Rican trial will begin in the late Spring of 2004.

In parallel with our efforts to obtain GMP-grade material for our efficacy trial, we have initiated various ancillary studies in Costa Rica aimed at furthering our understanding of the natural history of HPV and cervical neoplasia, and our understanding of immune responses to HPV infection. This has been possible given the personnel and infrastructure in place in Costa Rica. To date three studies have been performed, one aimed at understanding patterns of mucosal immunity during the menstrual cycle (N=200 women), a second aimed at understanding recently observed increases in HPV prevalence among the elderly (N=550 women), and a third to evaluate HPV infections in the genital tract of women after treatment for HPV-related cervical lesions (N=500 women). Biological specimens collected from participants in these ancillary studies have recently arrived in the United States. It is expected that we will initiate testing of these specimens in the coming year, to permit assessment of virologic and immunologic parameters required to achieve the objectives summarized above.

Finally, in addition to the trial designed to evaluate the efficacy of the GSK HPV16/18 VLP vaccine, trials are planned in the United States to evaluate an HPV16 chimeric virus-like particle (cVLP) vaccine, with the goal of having therapeutic potential against prevalent HPV infection, in addition to preventing incident infection. To achieve this goal, the cVLP vaccine contains, in addition to L1, a fusion protein composed of three HPV16 viral proteins, L2, E7, E2, with mutational inactivation of the Rb binding site of E7 and the DNA binding site of E2. Pre-clinical data suggest that immune responses to E7 and E2 may confer therapeutic efficacy. This trial will be underway as soon as GMP-grade cVLP vaccine is produced by our contractor.

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TITLE: Safe Motherhood Initiative: Pregnancy and Depression **AHRQ**
AWARD: \$10,000
CONTACT: Jacqueline Besteman, J.D., M.A., Director, EPC Program, CPTA

ORWH funded the Safe Motherhood Initiative which is an inter-agency work group to focus on women's health before, during and after pregnancy while continuing to promote infant health. ORWH/NIH, HRSA, OPHS, NIMH, CDC, NICHD, SAMHSA, and AHRQ are members of this group. The group selected perinatal depression as an area to develop a prototype project for inter-agency collaborative effort. Perinatal depression is understood to encompass major depressive episodes that either begin before pregnancy and continue through at least some of the pregnancy or postpartum period or have onset during pregnancy, within 1 month of delivery (as defined by the Diagnostic and Statistical Manual of Mental Disorders), or within the subsequent 11 months. This disorder can have devastating consequences. Perinatal depression affects not only the women experiencing it, but also the women's children. The Safe Motherhood Group is planning a conference for 2004 to bring all stakeholders up to the same level of appreciation for the quality and strength of the evidence base and to debate and decide next steps including research, to expand understanding of this under-appreciated medical and social problem. For that conference, the RTI-UNC Evidence Based Practice Center (EPC) has conducted this feasibility study for a full systematic review of the epidemiology, screening, and treatment of perinatal depression. In this report, we document the likely size of the evidence base by key question and category of question and describe the quality and strength of that evidence base as reflected in the "best" articles and data available.

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TITLE: Making and Informed Choice: Is Lumpectomy A Safe Option for Me? **NCI, AHRQ, OWH-DHHS, CPR**
AWARD: \$20,000
CONTACT: Diana Zuckerman, Ph.D., President, National Center for Policy Research for Women & Families

The ORWH funded the Making and Informed Choice: Is Lumpectomy A Safe Option for Me? to support the development of patient and provider education materials for women diagnosed with DCIS or LCIS, to help ensure that patients and health care providers have accurate, up-to-date, unbiased information based on research that has been conducted on these conditions. The pioneering support provided by ORWH will help provide the important foundation for this on-going public education and training initiative.

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TITLE: Sister to Sister Foundation: Everyone Has a Heart Health Fair **NHLBI**
AWARD: \$20,000
CONTACT: Greg Morosco, Ph.D.

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The **Sister to Sister – Everyone Has A Heart** Foundation was founded to increase awareness about heart disease as the number one killer of women and to encourage healthy lifestyles. It is the only national organization whose focus is on screening women for heart disease. Because of the lack of awareness among women about the seriousness of heart disease and the belief that women can modify, control, or treat their risk factors for this disease, the Foundation's mission is:

- To provide women with opportunities to be screened for early detection and treatment of heart disease, and
- To educate women about prevention measures, including a healthy diet, regular exercise, stress management, and smoking cessation to reduce heart disease risk factors.

This past February, Sister to Sister launched its national campaign in four cities – Chicago, New York, Philadelphia, and Washington, DC. Health fairs, executive women's breakfasts and community-based screening events were held in each city. As a part of its expansion strategy, Sister to Sister formed partnerships with a number of organizations to accomplish the campaign goals. The 2003 Woman's Heart Day national campaign partners were the American Heart Association, Bristol-Myers Squibb, *Woman's Day* magazine and Discovery Health Channel. In addition, we continued to receive strong support from our federal partners: Office of Women's Research, NIH; National Heart, Lung and Blood Institute and the Office of Women's Health, DHHS.

Highlights of the campaign include:

- More than 3,000 women received free heart health screenings.
- Over 3,500 women attended the health fairs.
- U.S. Department of Health and Human Services Secretary Tommy Thompson proclaimed the third Friday in February as National Woman's Heart Day.
- Sister to Sister conducted its second annual Capitol Hill screening event on February 11th, sponsored by Bristol-Myers Squibb, where nearly 200 people received free heart health screenings. The American Heart Association co-hosted the event.
- 160 million impressions were made during the 10-day campaign, including TV, radio, newspapers, websites and direct mail promotions.

Media highlights include:

- President Irene Pollin and spokesrobot Holly Heart made an appearance on the Today Show with Katie Couric and Matt Lauer.
- Other national media coverage included a comprehensive article in *Woman's Day* magazine, a one-hour program on Discovery Health Channel, articles in the *Washington Times* and *Roll Call*, and coverage of the campaign by numerous TV and radio stations. The campaign was advertised on the marquee at Madison Square Garden in NYC and the PECO Building Crown Lights in Philadelphia. The campaign banners in Penn Station remained on display for 30 days after the event.

- The Sister to Sister website B www.SistertoSister.org, was re-designed and included event schedules for the campaigns in the four cities. Links to the Sister to Sister website were posted on at least 25 websites.
- 140,000 Valentine's Day cards with local event information were distributed in the four cities by school children to their mothers on Valentine's Day.
- Billboard, shelter and transit ads promoted the campaign in Philadelphia and New York, NY.
- Onsite television coverage of the campaign took place in Chicago and Washington, DC.

2003 Heart Health Screening Results

A total of 3,175 women were screened in the four cities during the 2003 Woman's Heart Day Campaign. Findings for 2003 were similar to 2001 and 2002 screening results and continue to raise concerns. Thirty-four percent or 1072 women out of 3,175 screened were discovered to be at high risk for heart disease.

- The average age was 46 years.
- 30% of the women were postmenopausal.
- The ethnicity of the women was 45% African-American, 33% Caucasian, 10% Hispanic and 12% from other ethnic groups.
- 53% of the women had borderline or high total cholesterol (22% high).
- Nearly 40% of the women had high blood pressure.
- Blood glucose (non-fasting) was high in just over 6% of the women.

Three Year Campaign Results

During the past three years, the Woman's Heart Day Campaign has attracted over 10,000 women to the health fair events. We have screened 7,000+ women and reached close to 200 million individuals through our promotional activities. We have distributed 170,000 Valentine's Day card through school children to their mothers. Our screening results have consistently identified at least 30% of the individuals screened at high risk for heart disease. This powerful grassroots campaign is making a difference in the lives of working women!

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TITLE: Governors' Spouses Initiative To Curb Underage Drinking NIAAA
AWARD: \$100,000
CONTACT: Suzanne S. Medgyesi-Mitschang, Ph.D.

The ORWH supported a the "*Leadership to Keep Children Alcohol Free*" national initiative. This funding has enabled the initiative's momentum and has been a determining factor in attracting a new group of Governors' spouses to the project. Both individually and as a group, they have a deep commitment to women's and children's health issues with a clear indication that the initiative holds a high priority on the national women's health agenda. When the *Leadership* initiative was launched in March 2000, it was the **only** nationwide effort aimed at the prevention of alcohol use by children 9-15 years of age. A key purpose of the initiative was to place

childhood drinking prevention as a priority issue on the health agenda of the Nation and to prompt more research in that area. Highlights include:

- Since its launch, 45 Governors' spouses have participated in this national program. The current group of Governors' spouses includes 2 Lieutenant Governors (in states where the Governor is not married), 3 Federal judges, and 5 practicing lawyers.
- As state leadership has changed through elections, the Leadership has been successful in retaining the commitment of the majority of outgoing Governors' spouses (11 out of 15) who have joined in an 11-member Emeritus Group that is pledged to work actively in behalf of the Leadership at a national level.
- The Leadership has been particularly successful in the past year in moving the childhood drinking issue onto the policy agenda of Congress, the DHHS, other Federal agencies, and the National Academies of Science.
- As a result of a briefing for Senator Frist by one of the Emeritus Group members, Theresa Racicot (former First Lady of Montana), the Senator agreed to hold hearings on the issue of childhood drinking. Attending that meeting were NIH Director Elias Zerhouni and NIAAA Director Ting-Kai Li.
- The Leadership Governors' spouses have been responsible for initiating several meetings with the U.S. Surgeon General, Dr. Richard Carmona to brief him on the childhood drinking issue.
- On April 28, the current Co-Chairs of the Leadership initiative -- Columba Bush (Florida), Lori Hauser Holden (Missouri), Mary Easley (North Carolina), Hope Taft (Ohio) and two Emeritus Group members, Theresa Racicot and Sharon Kitzhaber (former First Lady of Oregon) -- met with Dr. Carmona to request that he agree to undertake a Surgeon General report on childhood drinking, only the second report on the alcohol issue since 1963. Dr. Carmona agreed to this request. Dr. Carmona also volunteered to partner with the Leadership Governors' spouses in his A50 State/50 School@ initiative.
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- At a July 14th meeting convened by the Leadership Co-Chairs and the NIAAA Director, Dr. Carmona officially agreed to a Call to Action on the issue of childhood drinking and identified NIAAA as the lead agency for this effort. Also attending that meeting were the Deputy Directors of SAMHSA and NHTSA.
- As a result of the activities of the Governors' spouses active involvement in the Leadership initiative, the issue of early alcohol use by pre- and early adolescents is now also receiving more attention within the NIH. NIAAA has recruited a new Associate Director whose major emphasis is upon the 9-15 age group. Also, NIMH, NICHD, and NIDA have been invited to participate in an Interagency Working Group along with SAMHSA, Indian Health Service,

CDC, HRSA, NHTSA, OJJDP and the Department of Education in preparation for the Call to Action.

- The Leadership was also invited by the National Academies of Science to present testimony at its public hearing on November 19, 2002 during the deliberations of the Committee on Developing a Strategy to Reduce and Prevent Underage Drinking.
- Current and former Governors' spouses are actively engaged in informing Congressional leaders about the consequences of childhood drinking. They have conducted policy briefings for legislators and State cabinet members and created public service announcements and videos for dissemination within their states. Several spouses have sponsored statewide poster contests and secured outdoor billboard advertising space in their states for a statewide childhood drinking prevention campaign. Their outreach and education also extends to making presentations at national conferences of major national organizations.

Recommendations for the Future:

- Encourage the U.S. Surgeon General to use the Abully pulpit@ of his office to sustain attention to the human, health, and economic costs associated with underage drinking.
- Actively engage in the development of a new Surgeon General report on childhood drinking prevention that will establish recommendations for the Nation on this issue and that will identify new areas of research for the NIH.
- Translate the commitment of Governors' spouses to the Leadership initiative into ongoing attention by the National Governors Association (NGA) to the issue of underage drinking.
- Place the underage drinking prevention issue upon the Domestic Policy Council agenda to accomplish the following:
 - 1) Use the Federal program development and budgeting process to promote better collaboration at the Federal and State levels across all entities with responsibilities for children, youth, and underage drinking; and
 - 2) Identify areas of research in which increased funding availability would lead to prevention or reduction of underage drinking.

A three part strategy will be developed:

Part I: Survey to assess curricular coverage of women's health in colleges and schools of pharmacy

Part II: Analysis of adequacy of existing evidence-based resources and teaching materials; and

Part III: Modular development of new materials for teaching health professions students and practitioners, including interdisciplinary education and practice activities.

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TITLE: Changing the Face of Medicine

NLM

AWARD: \$300,000

CONTACT: Patricia Tuohy, Health Exhibition Program

Changing the Face of Medicine, an exhibition at the National Library of Medicine, celebrates the achievements of women in medicine since they first gained admission to American medical school 150 years ago. Elizabeth Blackwell (1821-1910) and the first generation of women physicians struggled for access to education, hospital internships, and medical societies. Since then, women have challenged racial prejudice and gender bias to gain the professional opportunities and recognition they deserve. Gradually, women from diverse backgrounds have carved out successful careers in every aspect of the medical profession.

Whether shaping public health policy for whole populations, or providing health care to patients within a small community, women have changed the face of medicine at every level. They have also expanded its scope, often focusing on the needs of underserved populations or the ways in which race and gender affect health and illness. In scientific research, medical practice, and the education of future physicians, women have made important contributions to the health and well-being of us all, around the world.

It would be impossible to recognize the achievements and contributions of every woman physician. By examining the exhibition one may find that the women physicians whose stories are represented are examples of the fuller fabric of women's contributions to medicine and their personal achievements in society.

The exhibition at the National Library of Medicine includes historic artifacts, textile displays, audiovisual presentations, and digital interactives that showcase physicians' life stories. The installation and the online exhibition provide rich career resources and educational information for young people who are interested in pursuing a career in science and medicine. *Changing Faces of Medicine* will open to the public October 14, 2003 and will run through April 2, 2005.

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TITLE: Analysis and Documentation of Women's Health-Related
Content in the Curricula in the Schools of Public Health

HRSA

AWARD: \$35,000

CONTACT: Sabrina Mattoff, HRSA Office of Women's Health

ORWH provided funding to the Maternal and Child Health Bureau, HRSA, to support the analysis and documentation of women's health-related content in the curricula in the estimated 32 U.S. Schools of Public Health. The goals of this work will be to better understand the degree to

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which women's health issues are addressed within the public health school curriculum, including stand-alone women's health courses as well as the integration of women's health in courses that are required for a masters level degree; and to disseminate the findings to member schools in an effort to further inform faculty and curricular planners about sex and gender differences in public health training, policy, and research.

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TITLE: Obstetrician-Gynecologist's Knowledge and Practice Patterns NHLBI, HRSA
with Regard to Hormone Therapy

AWARD: \$35,000

CONTACT: Barbara Alving, M.D., Acting Director, NHLBI

The ORWH supported the study: "Obstetrician-Gynecologist's Knowledge and Practice Patterns with Regard to Hormone Therapy". The study will increase the knowledge regarding practice patterns of OB/GYN's with respect to hormone therapy as well as how to manage it with regard to all the conditions that are impacted by this therapy, from hot flashes, cancer, osteoporosis, heart disease, etc. Since this is an NIH institute wide issue, all relevant ICs will be contacted who are interested/involved in research related to HT and their participation solicited.

In the first year, a survey instrument will be developed in consultation with NHLBI. This survey will be sent to 5,000 randomly selected Fellows through letter mail and web-based postings. The initial mailing will take place in June of 2003, with repeat mailings to non-responders in July and August. Surveys returned by September 15, 2003, will be analyzed. The goal is to work toward a response rate of 60-65%. The results of this survey will serve as a baseline for monitoring our physicians' knowledge and treatment patterns. The survey instrument will consist of questions on physician knowledge regarding the scientific evidence relevant to HT, physician self-assessments of their qualifications and training, clinical vignettes that require more detailed answers regarding physician prescribing patterns for HT, and physicians' impressions of their patients' awareness and concerns regarding HT. The data will be analyzed at the College.

The contract was signed before the end of the fiscal year 2003. There were some modifications to the original plan, in that ACOG will now do 4 surveys in each of spring 2004, 2005, 2006 and 2007. This will provide 2 late post- E+P trial surveys which will also be a baseline for the E alone findings in 2005, and 2 post-E-alone surveys which will give immediate and later effects on practice knowledge, attitudes, prescription behavior. Next steps are to get the OMB approval process going and to revise the questionnaire, but there is more time for that since the first survey is scheduled for April 2004