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14. ABSTRACT

The purpose of this predoctoral and postdoctoral training program is to prepare clinical researchers who will impact the care of women with breast cancer. Under the two program directors, Drs. Ruth McCorkle and Michael DiGiovanna, the program has completed its fifth year. Over the entire training program, six predoctoral and five postdoctoral trainees have been funded. Breast cancer content has been included in the curriculum of the doctoral program. The postdoctoral program has been established within the School of Nursing and included in the bulletin and the School's website. Eleven new breast cancer researchers have been funded by this training grant. Seven breast cancer research studies have been implemented with subsequent funding. Six trainees have received national awards, over 54 presentation have been presented, 45 publications have been published, and 12 grants have been awarded to the trainees. The program has been sustained through an NIH, NINR T32 institutional training grant. These program outcomes were presented at the DOD Era of Hope meeting in Philadelphia, PA in June 2005.

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INTRODUCTION

The purpose of this predoctoral and postdoctoral training program is to prepare clinical researchers who will impact the care of women with breast cancer or women who are at risk for breast cancer. The predoctoral program prepares the beginning researcher with the knowledge and skills necessary to develop and test clinical interventions. This program builds on the Yale School of Nursing's current doctoral program and other related programs throughout the School of Medicine, including Epidemiology and Public Health. Postdoctoral training prepares the investigator to conduct more complex studies that involve an interdisciplinary perspective and more sophisticated analytic techniques.

The research-training program has completed its fifth year and we have requested an additional one year no-cost extension to support our remaining post-doctoral trainee. The two program directors, Drs. Ruth McCorkle and Michael DiGiovanna, met quarterly with their administrative team, which includes three additional researchers in breast cancer: Drs. Tish Knobf, Beth Jones, and Elizabeth Bradley. Dr. Knobf is a tenured Associate Professor at the Yale School of Nursing and has developed a program of research related to chemotherapy induced menopause. Dr. Jones is an Associate Professor in the Yale School of Epidemiology and Public Health and her research is related to factors associated with the incidence of breast cancer in black and white women. Dr. Elizabeth Bradley, an Associate Professor in the School of Public Health, has developed a program of research related to End-of Life care with cancer patients. All of the tasks of the program have been completed and will remain in place during the no cost extension.

BODY

Task 1: Completed.

Potential applicants for the research training program were identified and recruited. Breast cancer activities and training activities were developed and implemented.

Task 2: Completed.

All related courses previously developed were offered during the academic year and graduate students in other disciplines enrolled. Extensive research training experiences in breast cancer have been implemented with the program faculty. Assignments are based on interest of the trainee and match with the mentor's program of research. The predoctoral trainees, Shan Liu, Emily Haozous, and Cynthia O'Sullivan work directly with Drs. McCorkle and Knobf. Two of the pre-doctoral trainees are actively involved with developing their dissertation research, and Ms. O'Sullivan is a first year student engaged solely in coursework. Dr. LaCoursiere works directly with Drs. Knobf, McCorkle, and DiGiovanna and is currently completing her online survey of needs of women diagnosed with breast cancer. Dr. Regina Cunningham worked directly with Drs. McCorkle, Knobf, and DiGiovanna and has completed the study exploring women's needs post-treatment.

Task 3: Completed.

A post-doctoral program related to breast cancer research was developed and implemented. The program was built on the well established doctoral program in nursing at the Yale School of Nursing. All trainees were required to develop and implement a research proposal as part of their training and disseminate their findings in the literature and national meetings.

Task 4: Completed.

A formalized program of recruitment was established for both pre and post doctoral applicants who were nurses and non-nurses. Efforts were made to bring established researchers from other fields into breast cancer research and to recruit minorities. One post-doctoral trainee, Dr.

Dena Schulman-Green is a non-nurse and gerontologist and continues to work with our research team as a research scientist. Dr. Donna Clemmens, a national leader in adolescent health, is now studying adolescents whose mothers have developed breast cancer and Dr. Amy Kenefick, a gerontology nurse expert, is studying cognitive functioning of older women diagnosed with breast cancer. Ms. Emily Haozous, who is an expert advanced practice nurse, is a Native American studying pain in Native American women with breast cancer.

Task 5: Completed.

A formalized system to select and monitor trainees was developed and implemented. Drs. McCorkle and Knopf meet monthly to review the trainees' progress. Trainees were matched with research mentors based on their interests and mentors' program of research. Trainees meet weekly with their mentors and participate in their research activities while concurrently developing their own research proposals. Trainees submit their goals annually and they are peer reviewed as part of the reappointment process. This process has been extremely helpful and facilitated trainee's success in the program.

Task 6: Completed.

There have been a number of activities that the faculty and trainees have participated in that were initially established as a part of the Yale Cancer Center and the Pepper Center on Aging. These have included monthly grand rounds that are co-sponsored by this training program, and monthly meetings of the Breast Cancer Group, under Dr. DiGiovanna's leadership. See Appendix A for a list of these related seminars for the 2004-2005 academic years. The trainees have also participated in monthly meetings of the pre and postdoctoral trainees in the School of Nursing. Although the focus of this latter group is not solely on breast cancer, all of the participants are studying vulnerable populations with other chronic diseases and their discussions related to methodological and analytical issues are relevant. As part of the training program, several nationally recognized researchers were asked to present their research at the Yale Cancer Center Grand Rounds. Individual and informal gatherings were held with these researchers during their visits. Journal club meetings were held with all visiting professors. Dr. McCorkle and two of the trainees attended the 2nd American Psychosocial Oncology Society meeting in Phoenix, Arizona in February, 2005. Dr. McCorkle is on the Board of Directors, the Planning Committee, and moderated a session. In addition, Drs. McCorkle and Knopf and all the pre and post-doctoral trainees attended the 6th National Oncology Nursing Society Research Conference in Orlando, Florida in February, 2005. Faculty and trainees presented papers and posters at the meeting.

Task 7: Completed.

We have been successful in recruiting one new pre-doctoral and one postdoctoral trainee each year, and replaced trainees when they secured their own funding, e.g. Kenefick and Haozous.. Table 1 lists the trainees by years of appointment. Of the current post-doctoral trainees, Dr. LaCoursiere will complete her second year and continue until she completes her online survey study with women with breast cancer and prepares the data for grant submission and publication. Dr. Cunningham has completed her training and obtained an adjunct faculty position at the Robert Wood Johnson Institute of New Jersey. For the pre-doctoral trainees, Ms. Liu has completed her second year of the fellowship. Ms. Emily Haozous was appointed as a new trainee, but within the first few months she was notified that she was awarded an individual NRSA from the National Institute of Nursing Research. She is a Native American studying Native Americans experiencing cancer pain. Dr. McCorkle continues to be her sponsor. Ms. Cynthia O'Sullivan was appointed to replace Ms. Haozous.

The activities of the current two predoctoral trainees and one postdoctoral trainee are presented, followed by the activities of the trainees who have completed the program.

Currently Funded Two Predoctoral Trainees:

1. Shan Liu (Appointed September 1, 2003–August 31, 2005, 2nd year trainee). Ms. Shan Liu was selected among three applicants who applied to the program and was re-appointed for a second year of support. She has a strong background in oncology nursing and completed her Master's thesis with patients' with nasopharyngeal cancers in China. In this study, she was particularly interested in the ways cancer treatments affect patients' abilities to take care of themselves and function. She is working directly with Drs. McCorkle and Jones. Ms. Liu attended the Cancer Center Conferences and the pre and post doctoral seminars. She has completed her coursework and will begin her dissertation proposal during the next academic year.

Key Accomplishments of Ms. Liu

- As part of this training program, Ms. Liu has completed the following courses this past academic year:
Fall 2004
N903a Measurement of Clinical Variables
N907a Dissertation Seminar
N915a Doctoral Research Practicum II
N961a Contemporary Issues in Health Policy and Politics
Spring 2005
N915b Doctoral Research Practicum II
N905b Creating Method: Issues in Nursing Research
N907b Dissertation Seminar
N927b Seminar on Research of People with Cancer or at Risk of Cancer and their Families
CDE532 Epidemiology of Cancer

Reportable Outcomes of Ms. Liu

Submitted Publication:

- Liu, S., & He, G. (2005). Quality of life and coping styles in Chinese NPC patients after hospitalization (Master's Thesis). *Cancer Nursing*, 28(3):170-86.

2. Cynthia Kline O'Sullivan (Appointed November 16, 2004-June 30, 2005, 1st year trainee). Ms. O'Sullivan was appointed mid-November, 2004 to replace Ms. Haozous who secured an individual NRSA from the National Institute of Nursing Research. Ms. O'Sullivan has a broad background in acute care nursing, having completed her Master's degree in 1986 in Critical Care Nursing from the University of Pennsylvania. Over the course of twenty-four years, she has held hospital-based positions as a staff nurse, clinical specialist, and nurse manager in critical care and surgery, and was on the undergraduate nursing faculty of Sacred Heart University as an instructor in Medical-Surgical Nursing and Nursing Leadership & Management until entering Yale School of Nursing's doctoral program in September, 2004. Ms. O'Sullivan has just completed her first year in the Health Services Delivery and Policy Track. She is interested in improving outcomes for patients by examining their experiences during times of transition, such as hospital to home, and critical care to acute care, with an emphasis on improving services and policies to support these transitions. She is serving as an intervention nurse in the "Nursing Impact to Improve Quality of Life Outcomes in Ovarian Cancer Study." Ms. O'Sullivan's background in surgical nursing has been valuable in facilitating improvements related to wound healing and infection after ovarian cancer surgery. She is on the Ovarian

Cancer Cost Analysis Team, and attended the 6th Oncology Nursing Society's Research Conference and the Eastern Nursing Research Society Conference this year.

Key Accomplishments of Ms. O'Sullivan

- As part of this training program, Ms. O'Sullivan has completed the following courses this past academic year:
Fall 2004
N901a Methods for Nursing Research
N911a Doctoral Research Practicum I
N913a Analysis of Nursing Practice Concepts
N961a Contemporary Issues in Health Policy and Politics
N529a Statistics for Clinical Nursing Research
Spring 2005
N911b Doctoral Research Practicum I
N917b Advanced Statistics for Clinical Nursing Research
N927b Seminar on Research of People with Cancer or at Risk of Cancer and their Families
N941b Methods in Health Services Delivery and Policy
N943b Methodological Issues in the Study of Management of Health and Illness
LAW 21416 Health Law and Policy

Reportable Outcomes of Ms. O'Sullivan

Submitted Publication:

- Krauss JB, O'Sullivan CK. (in press). Policy Spotlight: Mental Health Parity. In D. Mason, J Leavitt, M. Chaffee (Eds). *Policy and Politics in Nursing and Health Care* (5th edition). St. Louis: Mosby.

Poster:

- Jones KR, Khaled-Markuch G, Fennie K, O'Sullivan CK, Giamattei A. (2005). Identifying best practices in wound management. Eastern Nursing Research Society 17th Annual Scientific Sessions, April, 2005.

Currently funded One Postdoctoral Trainee:

1. Dr. Sheryl LaCoursiere (Appointed September 1, 2003-August 31, 2005, 2nd year trainee). Dr. LaCoursiere received her PhD from the University of Connecticut in May 2003. Her program of research focuses on outcomes related to the provision of Internet-based support for women with breast cancer.

Key Accomplishments of Dr. LaCoursiere

- Dr. LaCoursiere is Principal Investigator on the study, *Breast Cancer Internet Information and Support (BCIIS)*, which she designed and is currently conducting. The study surveys women with breast cancer on the Internet, and assesses demographic information, medical history, quality of life, perceived support, self-efficacy, attitudes toward online health care, and spirituality, with the intent of developing an online information and support system. Co-investigators are Drs. McCorkle and Knobf, as well as Drs. Danuta Clemmens and Regina Cunningham, previous postdoctoral trainees. The web site for the survey is <http://breastcancersurvey.med.yale.edu>
- Dr. LaCoursiere is a co-investigator with Dr. Tish Knobf in the study *Breast Cancer Survivorship Rehabilitation: Development of an Educational Support Nursing Intervention*. The major goal of this project is to develop an educational-support intervention to improve adaptation and promote self care for survivors with breast cancer after therapy. Qualitative data on the experience of breast cancer has been collected and is currently being analyzed.

- Dr. LaCoursiere completed a secondary analysis of the Attitudes Toward Online Health Care (ATOHC) survey in 45 persons who listed cancer as a primary or secondary diagnosis in a previous instrument development study of persons who used the Internet ($n = 265$). In collaboration with Drs. McCorkle and Knobf, the study was published in *Journal of Medical Internet Research*.
- Dr. LaCoursiere has begun an ongoing collaboration with Dr. Cynthia Brandt and Dr. Prakash Nadkarni in the Yale Center for Medical Informatics (YCMI), which has focused on the integration of breast cancer and informatics. Dr. LaCoursiere's activities include a study on the use of the Unified Medical Language System (UMLS) of the National Library of Medicine for cancer communication terminology in over 100 medical languages; this will be for use in categorizing online breast cancer patient communications; and (2) the adaptation of Trial/DB, a software system used for clinical trials, for use with BCIS data analysis.
- Attendance at Yale School of Medicine Postdoctoral Network meetings: (1) Seminar on "Data handling and authorship issues," presented by Dr. Lawrence Cohen and Merle Waxman, Associate Dean of Academic Development, Yale School of Medicine; (2) Two networking receptions
- Attendance and participation at the biweekly pre-and-post doctoral meetings at Yale School of Nursing, led by Dr. Ruth McCorkle
- Attendance and participation at monthly post doctoral meetings at Yale School of Nursing, led by Dr. Margaret Grey, Associate Dean for Research Affairs
- Attendance at monthly Research Rounds, held at Yale School of Nursing
- Attendance and participation at the Center for Excellence in Chronic Illness Care Journal Club Seminars

Reportable Outcomes of Dr. LaCoursiere

Publications:

- LaCoursiere, S. P., Knobf, M. T., & McCorkle, R. (2005). Cancer patients' self-reported attitudes about the Internet. *Journal of Medical Internet Research*, 7(3), e22.
- LaCoursiere, S. P., & Sarkar, M. (2004). Communication and information needs and barriers: An international collaboration model. *Medinfo 2004*, 964-968.
- LaCoursiere, S. P. (2003). Research methodology for the Internet: External validity (generalizability). *Advances in Nursing Science*, 26(4), 257-273.
- Anderson, E., McDonald, D. D., Mikky, I., Brewer, T., Kosciwewski, C., LaCoursiere, S., Andrews, L., & Delaney, C. (2003). Health care implications and space allocation of research published in nursing journals. *Nursing Outlook*, 51(2), 70-83.

Publications in press:

- LaCoursiere, S. P. (2005). *Telehealth support in cardiovascular disease: Dissertation and executive summary*. Agency for Health Care Research and Quality/National Technical Information Service.

Manuscripts in preparation:

- LaCoursiere, S. P., Cunningham, R. C., Knobf, M. T., & McCorkle, R. (2005, in preparation). Telehealth interventions in breast cancer: A review of Internet and telephone delivery systems. *Cancer Investigations*.
- LaCoursiere, S. P., & Tarakeshwar, N. Psychological interventions used with breast cancer patients: A meta-analysis. *Psycho-Oncology*.
- Tarakeshwar, N., & LaCoursiere, S. P. A Meta-synthesis of psychological interventions used in breast cancer patients. *Journal of Psychosocial Oncology*.

- LaCoursiere, S. P. Internet-based intervention for persons with cardiovascular disease: An analysis of outcomes. *Nursing Research*.

Courses Taken

- *GHD 554 International Health Promotion and Communication: Theory and Application*. This is a required course in the Global Health major at the Yale School of Public Health. This course was by Dr. Gregory Payne, Professor at Emerson College and Tufts Medical School, who is on the Editorial Board of the journal *Health Communication*. In this course Dr. LaCoursiere was exposed to theories of verbal and written communication, and strategies for effective communication in health promotion. She also networked with a number of physicians who had organized health promotion campaigns, and participated in a group team related to crisis communication.
- *IMED 630 Practical and Ethical Issues in Clinical Investigation*. This is a required course for the Investigative Medicine program at Yale Medical School, directed by Dr. Henry Binder, Director of the Yale General Clinical Research Center. Coursework included issues in authorship and mentorship, ethics of clinical investigation, scientific presentation and teaching, and NIH and journal peer review processes. Dr. LaCoursiere also earned a certificate that satisfies NIH research ethical research requirements for career awards.
- *IMED 650 Seminars in Clinical Investigation*. This is a required course for the Investigative Medicine program at Yale Medical School, directed by Dr. Eugene Shapiro, Professor. The course was focused on successful grant writing, and included interdisciplinary participants from the Yale Medical School, Nursing School, Public Health, Geriatrics, and Molecular Medicine. The first half of the semester included subjects such as research topics, writing abstracts, critical review of sample grants, and submitting a grant. The second half of the semester was a mock study section, where class participants each submitted a grant, which was reviewed by classmates; and subsequently, had the opportunity to serve as both primary and secondary reviewers for classmates on their grants.

National Meetings, Presentations, and Networking:

- Dr. LaCoursiere presented a paper at the Association of Community Health Nursing Educators meeting in Hartford, CT in June, 2005, on telehealth interventions in breast cancer.
- Dr. LaCoursiere presented two posters at the Eastern Nursing Research Society 17th Annual Scientific Sessions in New York, NY in April, 2005, on characteristics of breast cancer patients who use the Internet, and cancer patients' attitudes toward online health care.
- Dr. LaCoursiere presented her dissertation research at the Eastern Nursing Research Society 16th Annual Scientific Sessions in Quincy, MA in April, 2004, where she had the opportunity to network with experts in oncology nursing, including Dr. Susan Bauer-Wu, Director, Phyllis Cantor Center, Dana-Farber Cancer Institute, and Dr. Hung-Ru Lin, Head of Research and Development, National Taipei College of Nursing, Taiwan. She was also invited to participate in the Dana-Farber Harvard Cancer Center Cancer Nursing Research – Program in Development.

The references for the abstracts are:

- LaCoursiere, S. P., Cunningham, R. S., Knobf, M. T., & McCorkle, R., (2005). Telehealth interventions in breast cancer: Evidence from two delivery systems. Proceedings of the Association of Community Health Nursing Educators Spring Institute and Annual Meeting, Hartford, CT, June 2-4, 2005.
- LaCoursiere, S. P., Knobf, M. T., McCorkle, R., & Degner, L. (2005). Breast cancer patients online: A study of demographic characteristics, health status, support, self-efficacy,

spirituality and attitudes toward online health care. Proceedings of the Eastern Nursing Research Society 18th Annual Scientific Sessions. New York, NY, April 7-9, 2005.

- LaCoursiere, S. P., Knobf, M. T., & McCorkle, R., (2005). Cancer patients' self-reported attitudes about the Internet. Proceedings of the Eastern Nursing Research Society 18th Annual Scientific Sessions, New York, NY. April 7-9, 2005.
- LaCoursiere, S. P. (2004). TELECARES-NI: TELEhealth CARdiac Education and Support by Nursing Intervention. Poster Presentation at the Eastern Nursing Research Society 16th Annual Scientific Sessions, Quincy, MA, April 1-3, 2004.

Grant Proposals Submitted:

Dr. LaCoursiere has submitted 8 grant proposals, 2 of which were funded, and 2 of which are under review:

- 2005- National Library of Medicine Informationist Program. *An Internet-based Cancer Communication Intervention*. #1F37LM009060. \$53,428, under review.
- 2005- Yale-Howard NIH P20 Partnership Center on Reducing Health Disparities by Self And Family Management. *Development of an Internet-based Information-Support Intervention for African American Women with Breast Cancer*. \$20,000, under review.
- 2005- Department of Defense Prostate Cancer Research Program (DOD PRCP). *Telehealth Support in Prostate Cancer*. \$125,000, not funded. Score 1.9.
- 2004- Sigma Theta Tau International Honor Society of Nursing, Delta Mu Chapter, Yale University. *An Internet-Based Low-Literacy Cancer Communication Intervention*. \$1,500, funded.
- 2004- Pfizer Clear Health Communication Program. *An Internet-Based Low-Literacy Cancer Communication Intervention*. \$195,000, not funded.
- 2004- DOD Breast Cancer Research Program, Multidisciplinary Postdoctoral Award, *Telehealth Support in Breast Cancer*. \$374,900, not funded. Score 1.7.
- 2003- NIH Clinical Research Loan Repayment Program, National Cancer Institute. *Telehealth Support in Breast Cancer*. \$40,517, funded.
- 2003- Medical Library Association, Lindberg Research Fellowship Award. *Telehealth Support in Breast Cancer*. \$25,000, not funded.

Dr. LaCoursiere has also received partial funding from Dr. Tish Knobf's grant from the Beatrice Renfield-Yale School of Nursing Clinical Research Initiatives Fund. The grant, *Cancer Survivorship Rehabilitation: Phase I Development of an Educational-Support Nursing Intervention* seeks to develop Internet-based educational and support materials for women with breast cancer. This funding has allowed Dr. LaCoursiere to develop the *Breast Cancer Internet Information and Support (BCIIS)* web site that is being used to survey breast cancer survivors.

Professional Activities

- Dr. LaCoursiere was invited to be a Research Affiliate of the University of Connecticut Center for Health/HIV Intervention and Prevention in May 2005. She was subsequently invited to be a member of the Cancer Interest Group at the University of Connecticut Health Center, and is developing a collaboration with Dr. Carolyn Runowicz, President-Elect of the American Cancer Society, and breast cancer researcher.
- Dr. LaCoursiere received the 2005 Excellence in Nursing Informatics Award from the Oncology Nursing Society in April, 2005
- Dr. LaCoursiere was invited to discuss her journal article on Internet-based research and external validity in the Yale School of Nursing Doctor of Nursing Science Class N905, *Creating Method: Issues in Nursing Research*, March, 2004.

- Dr. LaCoursiere became an invited member of Steering Committee of the newly formed Alliance for Nursing Informatics, which represents 20 nursing informatics groups in the United States.
- Dr. LaCoursiere was selected as Web Site Advisory Board Member, American Nurses' Association- American Nurses' Credentialing Center (ANCC)
- Dr. LaCoursiere was invited to be a Judge for the 2005 International Media Awards for Nursing Excellence, Sigma Theta Tau International Honor Society of Nursing
- Dr. LaCoursiere was invited to present on Internet-based research and external validity, Yale Doctor of Nursing Science Program, Nursing N905 course, Creating Method: Issues in Nursing Research, March 4, 2004

In addition, Dr. LaCoursiere:

- Reviewed 3 manuscripts for the journal *Advances in Nursing Science*
- Reviewed 5 manuscripts for the journal *Computers, Informatics, Nursing*
- Reviewed 27 abstracts for Sigma Theta Tau International Honor Society of Nursing 38th Biennial Convention, Clinical Sessions, Indianapolis, IN, to be held November 12-16, 2005
- Reviewed 5 papers for American Medical Informatics Association Annual Symposium, to be held in Washington, DC, October 22-26, 2005.
- Reviewed 10 abstracts for the Eastern Nursing Research Society 17th Annual Scientific Sessions, New York, NY, held April 7-10, 2005
- Reviewed 6 abstracts for the NIH National State of the Science Congress in Nursing Research, Washington, DC., held October 7-8, 2004
- Reviewed 5 papers for 11th World Congress on Medical Informatics, San Francisco, CA, held September 7-11, 2004
- Reviewed 10 abstracts for the Eastern Nursing Research Society 16th Annual Scientific Sessions, Quincy, MA, held April 1-3, 2004

Key Accomplishments of Trainees

Four Predoctoral Trainees who have completed the training program:

1. Dr. Shiu-yu Lee (Appointed July 1, 2000-June 30, 2002) accepted a tenure track position as an assistant professor at National Taipei College of Nursing, Taipei Taiwan, August, 2003. Dr. Lee graduated in May, 2003. Her dissertation study was entitled "Treatment Decision-Making for the Primary Treatment of Early-Stage Breast Cancer in Chinese American Women," that was under the supervision of Dr. Tish Knobf. Dr. McCorkle also served as a faculty member of the committee. Dr. Lee presented a part of her dissertation study, entitled "Decision-Making for Primary Treatment by Chinese American Women with Early-Stage Breast Cancer," at Oncology Nursing Society 29th Congress, Anaheim, California, April 2004.

This past year, Dr. Lee's primary responsibility as a nursing faculty at National Taipei College of Nursing included teaching topics related to cancer and cancer care in graduate program and BSN program, and conducting research. She has worked on a nation-wide, three-year project, entitled "Ensuring Quality Cancer Care - Integrated Project for Cancer Centers in Taiwan." This project aims to develop indicators and measures for quality cancer care for six common cancers, and assess quality of care among cancer centers in Taiwan. Dr. Lee's responsibility in this project is to work with other cancer researchers in Taiwan to develop indicators for breast cancer care from perspectives of patient communication, patient participation, treatment decision-making and patient safety. She has also submitted a prospective study to describe treatment decision-making and health-related quality of life among Taiwanese women with early-stage breast cancer. This study has been funded recently for NT 450,000 for the coming academic work by National Science Council in Taiwan. The purpose of this prospective study is to describe the decisional conflict, participation, expectation and value

as the Taiwanese women make the treatment decision for their early-stage breast cancer. The women will be also followed for six months to evaluate their regret and satisfaction about the decision, and their health-related quality of life after the primary treatment for their breast cancer. This study is the first funded study in Taiwan to explore the issue of treatment decision-making in cancer care. Findings from this study will advance the knowledge about treatment decision-making in cancer care in Taiwan and facilitate cancer clinicians to help women with breast cancer to make an informed decision. Finally, she has been also been involved actively in the Taiwan Oncology Nursing Society and local breast cancer support groups to promote the care of the women with breast cancer and their family.

2. Pamela Potter (Appointed July 1, 2001-June 30, 2003). For her fifth year as a full time doctoral student, Pamela Potter was funded by an American Cancer Society Scholarship and a Small Grant from the Oncology Nursing Society Foundation (sponsored by Orthobiotech). After her two years funding on the grant, she continued to meet with the DOD pre-doc and post-doc fellows. Dr. McCorkle was Ms. Potter's academic and research advisor and dissertation chair. Dr. Potter completed her dissertation and graduated from the YSN doctoral program May, 2004. She was recruited as a post-doctoral trainee at the University of Washington's School of Nursing, Biobehavioral Nursing Research Training program.

Reportable Outcomes of Ms. Potter **Dissertation**

- Potter, P. (2004) Breast Biopsy and Distress: Testing a Reiki Intervention.

Publications

- Potter, P., & Guzzetta, C. E. (2004). Holistic caring process. In B. M. Dossey, L. Keegan, & C. E. Guzzetta (Eds.), *Holistic nursing: A handbook for practice* (4th ed.). Sudbury, MA: Jones & Bartlett Publishers.

Posters

- Potter, P. (2004, April). *Recruitment issues encountered for a complementary therapy clinical trial addressing the peridiagnostic distress associated with breast biopsy*. Poster presented at the Sixteenth Annual Scientific Sessions of the Eastern Nursing Research Society, Boston, MA.

Presentations

- Presenter, "Reiki for Self-Healing," New Beginnings: Complementary Approaches to Living Well Today, National Cancer Survivors Day, Yale New Haven Medical Center, May 2004.
- Presented and Interviewed on series of four 30 minute radio programs, "Reiki and Women's Health," WMRD Radio, Middletown, CT. June to October 2003.

Grants Awarded

- The Effects of Reiki on the Psychological Distress of Women Undergoing a Biopsy. Received from the American Cancer Society. \$15,000.00 Small Grant for conducting the Breast Biopsy and Distress research study, from Oncology Nursing Foundation and Orthobiotech. \$8,500.
- Received an Award for Excellence in Holistically Oriented Student Research, Recognition of Outstanding Academic Performance, Connecticut Holistic Health Association, 2004.

Grant Proposals Submitted

- Submitted to the DOD for the BCRP2 Clinical Research Nurse Award. 06/2003 for a post

doctoral study of a Reiki intervention for women newly diagnosed with breast cancer, a crossover design clinical trial pilot to specifically address immunobiological outcomes. Received an "excellent" rating but was not funded.

National Meetings and Networking

- Ms. Potter participated in Cancer Grand Rounds at YNHH with Timothy Ahles, PhD, a psychologist from Dartmouth, related to his research on cognitive changes in treatment induced menopausal women treated for breast cancer. She discussed the possibility of post-doctoral work at that institution. Ms. Potter is an active member of the Oncology Nursing Society and the Psychoneuro-immunology and Complementary Therapy Special Interest Group, and Co-Editor of the ONS PNI/CT SIG Newsletter. Ms. Potter presented her dissertation at the 8th *National Oncology Nursing Society Research Conference* (Florida, February 2005).

Dissertation Research

Ms. Potter completed her dissertation data collection and analysis and successfully defended her dissertation, a clinical trial of a complementary therapy (Reiki) versus conventional care control for relieving the psychological distress experienced by women undergoing a breast biopsy. Due to institutional barriers, subject selection bias and barriers to recruitment for a complementary therapy study, the final sample was 32 women (17 randomized to Reiki treatment group, 15 randomized to conventional care group) scheduled for breast biopsy. Although women in the treatment group reported positive experiences with the Reiki, due to sample size, the data lacked sufficient power to demonstrate whether or not the Reiki treatment had any more effect than usual care on the distress outcomes. This work provided Ms. Potter with a strong foundation of experience for conducting clinical research. She graduated May 2004.

Ms. Potter has been awarded a two-year post doctoral fellowship in Biobehavioral Nursing Research at the University of Washington School of Nursing. Her research interests lie in the study of complementary therapies, specifically biofield therapies like Reiki and Qigong, for people living with cancer, in particular, breast cancer. Psychological measures alone do not seem to capture the effect of these interventions. Biological measures, possibly immune measures, in tandem with psychological measures may better reflect intervention outcomes. With this additional training Ms. Potter hopes to launch an independent research career as a nurse scientist in the field of biobehavioral research with complementary therapies for people living with breast cancer.

3. Yiyuan Sun (Appointed July 1, 2002-June 30, 2004). Ms. Yiyuan Sun is a fourth year doctoral student. Ms. Sun has completed the required course work and defended her dissertation proposal, entitled "Disclosure of Breast Symptoms by Chinese Women in the United States" in June, 2004. Dr. Tish Knobf is the chair of her dissertation committee, with Drs. McCorkle and Groce serving as faculty members of the committee. Ms. Sun met weekly with Drs. Knobf and McCorkle and communicated with other team members regularly. Ms. Sun received a grant from the Oncology Nursing Society to complete her study.

Ms. Sun completed data analysis and prepared results for a research study on quality of life and symptom distress among women with breast cancer undergoing adjuvant therapy, for which two manuscripts are currently in preparation. Ms. Sun volunteered at the Chinese Unit at American Cancer Society (Flushing, New York City) to assist in research and activities of breast cancer support group. Ms. Sun worked as an intern at the Center for Immigrant Health at New York University School of Medicine to assist in cancer research and outreach to Chinese community

in Manhattan. Ms. Sun attended the bimonthly pre- and post-doctoral meetings and attended the monthly qualitative research study group at Yale School of Nursing. Also, Ms. Sun attended Yale Cancer Center Grand Rounds regularly.

Reportable Outcomes of Ms. Sun

Manuscripts in review:

- Knobf, M, T., & Sun, Y. (2005). A longitudinal study of symptoms and self-care activities in women treated with primary radiotherapy for breast cancer. *Cancer Nursing*, 28(3): 210-18.

Presentations:

- Symptom Disclosure by Women with Breast Symptom(s). ONS Research Short Course, April, 2003, 28th Annual ONS Congress, Denver, CO.

Grants Awarded:

- ONS Research Short Course Award to attend the annual congress and pre-congress workshop, funded by NCI, 2003.
- ONS Small Research Grant October, 2004
- Sigma Theta Tau International, Delta Mu Chapter Research/Clinical Project Funds, 2005

Grant Proposals Submitted:

- Submitted to Sociologist for Women in the Society (SWS) Barbara Rosenblum Scholarship for the Study of Women and Cancer, 04, 2004
- Submitted to Sigma Theta Tau International, Delta Mu Chapter Research/Clinical Project

Dissertation Proposal:

Disclosure of Breast Symptoms by Chinese Women in the United States: The purpose of this study is to understand how Chinese women in the U.S. decide to disclose their breast symptoms to a health care provider and/or lay people. The specific aims of this proposal are to: (1) describe how Chinese women perceive and interpret their symptoms; (2) identify factors influencing Chinese women's decisions about disclosing the self-discovered breast symptom; and (3) explore the linkages among and meanings of these factors.

Early detection and treatment are important strategies that can reduce the chance that a woman will die from breast cancer. However, early detection and treatment are contingent on the willingness of a woman taking her first step to seek care. Although most of the women with breast cancer seek care in time, at least one third of women wait to see the doctor for 3 months or more. Women who delay seeking care are more likely to be diagnosed with later staged breast cancer, increased tumor size and more positive nodes, all of which are associated with significantly lower 5-year survival rates and poorer quality of life.

Breast cancer is the most common form of cancer and second in cancer deaths among Chinese American women. The incidence of breast cancer in Chinese women is increasing worldwide and their risk of breast cancer increases after immigrating to the United States. Although the annual incidence rate of breast cancer in Chinese Americans (55 per 100,000) is significantly lower than in their Caucasian counterparts (111.8 per 100,000), their survival rates are not better, and the annual increase of the incidence rates is 3 times higher than in Caucasians. Chinese American women are 40% more likely to have a tumor size larger than 1 cm compared to Caucasian women. Although we do not know exactly why these differences exist, Chinese women experience unique cultural, socioeconomic, and systematic barriers related to access to and utilization of health services in the United States.

Given the fact that little is known about how Chinese women decide to disclose their breast symptom, the proposed study will use a generic qualitative design. Purposive and snow ball

sampling method will be used to recruit participants. Potential eligible participants will be recruited from Chinese Unit at American Cancer Society (Flushing, New York), Chinese Community at Manhattan, New York, Chinese church in New Haven, and by flyers posted at web site of Association of Chinese Students and Scholars at Yale (ACSSY) and Chinese grocery stores and restaurant at New Haven and Milford (CT). To date, Ms. Sun has recruited 14 women and completed interviews on 11 of them.

A semi-structured in-depth interview will be scheduled at a time and place convenient for the participants although participants will be encouraged to call if they have additional information to share. Each interview will be tape-recorded and last 40-60 minutes. Constant comparison method will be used to analyze the data by the trainee, a research assistant and the mentor separately. A selected group of participants will be asked to review the study results for validation.

The findings of this study will help health providers understand Chinese women's responses to their breast symptoms and prepare health providers to assist Chinese women in making timely decisions of disclosing breast symptoms. The knowledge of symptom disclosure will not only extend the theoretical base of nursing through empirical investigation, but also provide insight and new direction for clinical practice and cancer control in breast cancer research.

4. Emily Haozous (Appointed September 1, 2004- November 16, 2004).

As a second year, full time doctoral student, Ms. Emily Haozous was selected from among three applicants for her initial appointment to the DOD training program. She has a strong background in oncology nursing and completed her Master's thesis investigating cancer pain in American Indians. In this study, she was particularly interested in the experience of cancer pain for women with breast cancer. She is working directly with Drs. Knobf and McCorkle. Ms. Haozous attended the Cancer Center Conferences and the pre and post doctoral seminars. She is beginning her third year of coursework.

Key Accomplishments of Ms. Haozous

- As part of this training program, Ms. Haozous has completed the following courses this past academic year:

Fall 2004

903a Measurement of Clinical Variables

907a Dissertation Seminar

915a Doctoral Research Practicum II

925a Qualitative Research in Nursing

916a Contemporary Issues in Health Policy and Politics

Spring 2005

915b Doctoral Research Practicum II

580b Introduction to Qualitative Research

905b Creating Method: Issues in Nursing Research

907b Dissertation Seminar

927b Seminar on Research of People with Cancer or at Risk of Cancer and their Families

Reportable Outcomes of Ms. Haozous

Grants Awarded:

National Institutes of Nursing Research National Research Service Award # 1 F31 NR009314-01, Exploring Cancer Pain in Southwest American Indians. Awarded Fall, 2004 to Spring 2007.

American Cancer Society Predoctoral Fellowship in Nursing Award # 108159, Understanding the Cancer Pain Experience in Southwestern Native Americans. Awarded Fall 2004 to Spring 2007.

Four Postdoctoral Trainees Who Have Completed the Training Program:

1. Dr. Donna Clemmens (Appointed October 1, 2000-September 30, 2002). Dr. Clemmens accepted a tenure track position as an Assistant Professor at New York University, New York City, January, 2003. Dr. Clemmens is nationally recognized for her work in Maternal and Child Health, and has expanded her field of study to adolescents and mothers with breast cancer. Dr. Clemmens is working with the NYU's Cancer Center (Kim Glassman-Director; Dr. Yelena Novik, Oncologist) on her research regarding supportive interventions for adolescents whose mothers have breast cancer. She is a co-investigator on Dr. Lacoursierre's and Knobf's Breast Cancer Online Survey with questions that include maternal perceptions about adolescent children's adaptation. Dr. Clemmens' grant, R03 on the topic of "Adolescent Adjustment to Maternal Breast Cancer" was not funded. Dr. Clemmens has revised the proposal to study adolescents and mothers with breast cancer and plans to resubmit for the October 1st, 2005 deadline. She has completed a manuscript on the funded ONS study-"Adolescents and mothers with breast cancer" for submission to the Journal of Psychosocial Oncology. She presented this paper at the ONS research conference in Feb 2005, and a related paper, "The Impact of Breast Cancer on Adolescents: Implications for Practice", at the New York University Medical Center Nursing Research Conference, in April 2005. Dr. McCorkle continues to mentor Dr. Clemmens and meets with her quarterly to review her manuscripts and progress.

Publications for the past year-although not in the area of breast cancer

- Sadler, L., & Clemmens, D. (2004). Ambivalent grandmothers raising teen daughters and their babies. *Journal of Family Nursing*, 10(2), 211-231.
- Clemmens, D. & Hayman, L. (2004). Increasing activity to reduce obesity in adolescent girls: A research review. *JOGNN*, 33(6), 801-808.
- Clemmens, D., Engler, A., & Chinn, P. (2004). Learning and Living Health: College Students' Experiences with an Introductory Health Course. *Journal of Nursing Education*, 43(7), 313-318.
- Clemmens, D., Knafl, K., Lev, E., & McCorkle, R. (2004). Cervical cancer: Stories of long-term survival. *Journal of the Psychological Social and Behavioral Dimensions of Cancer*. (Reviewed and revision in process).

2. Dr. Dena Schulman-Green (Appointed January 1, 2001-August, 2002). A gerontologist specializing in end-of-life care, Dr. Schulman-Green's program of research has focused on factors affecting palliative care in breast cancer, including care trajectories, i.e. transition from curative to palliative care, patient/family decision-making; and clinicians' education, attitudes, and practice of palliative and hospice care. Since her training began, Dr. Schulman-Green has worked with Dr. McCorkle to further her research agenda. Dr. Schulman-Green has continued to work closely with Program Faculty member Dr. Elizabeth Bradley, of the Yale University School of Medicine's Department of Epidemiology and Public Health, on various research projects. She is also a member of a research team led by Dr. Sidney Bogardus, who is the Medical Director of the Adler Geriatric Assessment Program, Pepper Aging Center at Yale University. On September 1, 2002, Dr. Schulman-Green began working with Dr. McCorkle as her project director on an R01 NIH grant testing a home care intervention with women diagnosed with ovarian cancer.

Key Accomplishments of Dr. Schulman-Green

- Recipient, 2004 Research Award, National Hospice and Palliative Care Association for presentation, "Reasons for delayed hospice enrollment as identified by primary caregivers." Presented at the Clinical Team Conference and Exposition on Hospice and Palliative Care, Las Vegas, NV, March, 2004.

- Publication of 12 research articles related to oncology and palliative care, with 2 in review and 2 in preparation.
- Project Director/Co-Investigator for NIH-funded clinical trial, "Interventions to enhance quality of life outcomes in ovarian cancer."
- Principal Investigator of pilot study, "Women's role in the management of advanced breast cancer." Data analysis ongoing.
- Principal Investigator of pilot study, "Women's role in the management of ovarian cancer." Data collection ongoing.
- Completion of quantitative and qualitative evaluation and report on the Palliative Care Services at Yale-New Haven Hospital commissioned by the Yale Cancer Center.
- Completion of pilot study (Co-Investigator) testing a goal setting instrument in the cancer population and PI of clinical trial of the instrument.
- Completion of study on delayed hospice referral (Co-Investigator).
- Completion of study on nurses' communication of prognosis and implications for hospice referral.
- Completion of 12 presentations primarily related to oncology and palliative care at professional conferences, 3 presentations at the Yale Program on Aging, and 1 presentation at the Yale Cancer Center Prevention and Control Conference.
- Completion of Course, "Epidemiology of Cancer," Yale School of Medicine, Dept. of Epidemiology and Public Health.
- Attendance at meetings of the Palliative Care Resource Group at Yale-New Haven Hospital, and of the Palliative Care in the ICU Group.
- Attendance at rounds of the Yale Cancer Center and Yale Medical Grand Rounds.
- Attendance at meetings of the Yale Program on Aging Seminars.
- Networking with professionals and organizations involved in breast cancer treatment, palliative care, oncology, and aging at formal events and informal meetings.
- Attendance at 3 seminars on grant-writing, offered by the Yale School of Nursing, Yale School of Medicine, and the Association for Gerontology in Higher Education.
- Attendance at monthly post-doctoral meetings and bimonthly pre- and post-doctoral meetings.

Reportable Outcomes of Dr. Schulman-Green

Publications

- Kenefick, A. L. & Schulman-Green, D. The model of sequential trials: Managing pain in the context of cognitive impairment. *Alzheimer's Care Quarterly*. (in press)
- Cherlin, E., Johnson-Hurzeler, R., Fried, T., Prigerson, H., Schulman-Green, D., Bradley, E.H. Communication between physicians and family caregivers about care at the end of life: When do we talk and what do we say? *Journal of Palliative Medicine*. (in press)
- Naik, A. D., Schulman-Green, D., McCorkle, R., Bradley, E. H., & Bogardus, S. T. Will older persons and their clinicians use a shared decision making instrument? *Journal of General Internal Medicine*. (in press)
- Schulman-Green, D., McCorkle, R., Cherlin, E., Johnson-Hurzeler, R., & Bradley, E.H. (2005). At the crossroads: Making the transition to hospice. *Palliative and Supportive Care*, 2, 351-360.
- Schulman-Green, D., Harris, D., Xue, Y., Czaplinski, C., Donovan, C., Loseth, D., & McCorkle, R. (2005). Working with patients in pain: The role of unlicensed staff on an inpatient oncology unit. *Cancer Nursing*, 28(4), 2-9.

- Schulman-Green, D., McCorkle, R., Cherlin, E., Johnson-Hurzeler, R., & Bradley, E. (2005). Nurse's communication of prognosis and implications for hospice referral: A study of nurses caring for terminally ill hospitalized patients. *American Journal of Critical Care*, 14(1), 64-70.
- Kenefick, A. L., & Schulman-Green, D. (2004). Caring about pain in cognitively impaired nursing home residents. *International Journal for Human Caring*, 8(2), 32-40.
- Cherlin, E., Schulman-Green, D., McCorkle, R., Johnson-Hurzeler, R., & Bradley, E. (2004). Family perceptions of clinicians' outstanding practices in end-of-life care. *Journal of Palliative Care*, 20(2), 113-116.
- Schulman-Green, D. (2003). Coping mechanisms of physicians who routinely work with dying patients. *Omega: Journal of Death and Dying*, 47(3), 253-264.
- Schulman-Green, D. (2003). How do physicians learn to provide palliative care? *Journal of Palliative Care*, 19(4), 246-252.
- Schulman-Green, D. (2002). Physicians' feelings about themselves and their patients. *Journal of the American Medical Association*, 278(9), 1114.
- Schulman-Green, D. (2002). Psychosocial issues in palliative care: Physicians' self-perceived role and collaboration with hospital staff. *Journal of Terminal Oncology*, 1(1), 1-7.
- Bruce, E. & Schulman-Green, D. (2002). Planning for the future of long-term care in Massachusetts. *Southwest Journal of Aging*, 18(1), 17-20.
- Schulman-Green, D. (2002). Psychosocial issues in palliative care: Physicians' self-perceived role and collaboration with hospital staff. *American Journal of Hospice and Palliative Care*, 20(4), 34-40.
- Schulman-Green, D. (1999). Deceiving appearances: Communicating with the facially inexpressive older adult. *Journal of Gerontological Nursing*, 25(1), 40-43.

Manuscripts in review

- Schulman-Green, D., Naik, A. D., McCorkle, R., Bradley, E. H., & Bogardus, S. T. What factors influence goal setting between older adults and their clinicians? *Patient Education and Counseling*.
- Schulman-Green, D. & Bradley, E.H. Conducting qualitative interviews with seriously ill individuals about end-of-life issues: Successful strategies and techniques. *Journal of Pain and Symptom Management*.

Manuscripts in preparation

- Schulman-Green, D., & McCorkle, R. An expansion of Institute of Medicine (IOM) barriers to excellent palliative care: Reports of palliative and non-palliative physicians. *Journal of Palliative Medicine*.
- Xue, Y., Schulman-Green, D., Harris, D., Czaplinski, C., Donovan, C., Loeth, D., & McCorkle, R. Pain knowledge and attitudes of healthcare providers on an oncology unit.

National Meetings, Presentations, and Networking

Dr. Schulman-Green has attended/presented at the following national meetings where she has had the opportunity to network with experts in end-of-life care.

- Schulman-Green, D. Interviewing seriously ill individuals about end-of-life issues: Successful strategies and techniques. Presented at the 6th Clinical Team Conference of the National Hospice and Palliative Care Organization, Atlanta, GA, April 2005.
- Schulman-Green, D. Working with patients in pain: The role of unlicensed staff on an inpatient oncology unit. Presented at the 31st Annual Meeting of the Association for Gerontology in Higher Education, Oklahoma City, OK, February, 2005.

- Schulman-Green, D., Naik, A.D., McCorkle, R., Bradley, E.H., & Bogardus, S.T. What hinders shared goal setting between older adults and their clinicians? Presented at the 2004 Annual Meeting of the American Geriatrics Society, Las Vegas, NV, May 2004.
- Naik, A.D., Schulman-Green, D., McCorkle, R., Bradley, E.H., & Bogardus, S.T. Development, Refinement, and Responses to a Shared Decision Making Instrument. Presented at the 2004 Annual Meeting of the American Geriatrics Society, Las Vegas, NV, May 2004.
- Xue, Y., Schulman-Green, D., Harris, D., Czaplinski, C., Donovan, C., Loseth, D., & McCorkle, R. Pain knowledge and attitudes of healthcare providers on an oncology unit. Presented at the Annual Meeting of the Eastern Nursing Research Society, Boston, MA, April 2004.
- Harris, D., Schulman-Green, D., Xue, Y., Czaplinski, C., Donovan, C., Loseth, D., & McCorkle, R. Working with patients in pain: The role of unlicensed staff on an inpatient oncology unit. Presented at the Annual Meeting of the Eastern Nursing Research Society, Boston, MA, April 2004.
- Schulman-Green, D. & Miltiades, H. Cultural attitudes and health care practices related to illness and end-of-life care. Presented at the 30th Annual Meeting of the Association for Gerontology in Higher Education, Richmond, VA, February, 2004.
- Schulman-Green, D., McCorkle, R., Cherlin, E., Johnson-Hurzeler, R. & Bradley, E.H. Reasons for delayed hospice enrollment as identified by primary caregivers. Presented at the Clinical Team Conference and Exposition on Hospice and Palliative Care, Las Vegas, NV, March, 2004.
- Naik, A.D., Schulman-Green, D., Bradley, E.H., & Bogardus, S.T. Older persons' willingness and capacity to use a goal-setting instrument. Presented at the 25th Annual Meeting of the Society for Medical Decision-Making, Chicago, IL, October, 2003.
- Schulman-Green, D. Providing palliative care to older adults: Physicians' attitudes, behavior, and education. Presented at the 29th Annual Meeting of the Association for Gerontology in Higher Education, St. Petersburg, FL, February, 2003.
- Miltiades, H. & Schulman-Green, D. Rooting out ageism: Instructional methodologies for the classroom. Presented at the 29th Annual Meeting of the Association for Gerontology in Higher Education, St. Petersburg, FL, February, 2003.
- Schulman-Green, D., McCorkle, R., Cherlin, E., Johnson-Hurzeler, R. & Bradley, E.H. Nurses' communication of prognosis and implications for hospice referral. Paper presented at the 55th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA, November, 2002.
- Waters, L., Kolb, K.N., Sung, T.H., Schulman-Green, D., Fuller, J. & Lynn, J. End-of-life care in a changing world: A continuum of perspectives. Symposium presented at the 55th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA, November, 2002.
- Schulman-Green, D., Waters, L., Kasl, S., Glass, T., Schaie, K.W., & O'Hanlon, A. Student Mentoring: Beyond academic advising to comprehensive guidance. Workshop presented at the 55th Annual Scientific Meeting of the Gerontological Society of America, Boston, MA, November, 2002.
- Schulman-Green, D. Providing palliative care to older adults: Physicians' attitudes, behavior, and education. Presented at the 29th Annual Meeting of the Association for Gerontology in Higher Education, St. Petersburg, FL, March, 2003.
- Schulman-Green, D. End-of-life care in medical education: How prepared are physicians to provide palliative care? Presented at the 28th Annual Meeting of the Association for Gerontology in Higher Education, Pittsburgh, PA, February, 2002.
- Schulman-Green, D., Cotter, J., Silverstein, N., & Waters, L. Teaching 101: Teaching skills for the excellent teacher or teaching assistant. Workshop coordinated for the 28th Annual

Meeting of the Association for Gerontology in Higher Education, Pittsburgh, PA, February, 2002.

- Schulman-Green, D. How prepared are physicians to address psychosocial and spiritual aspects of palliative care? Presented at the 54th Annual Scientific Meeting of the Gerontological Society of America, Chicago, IL, November, 2001.
- Dr. Schulman-Green attended the Boston College End-of-Life Conference held in Boston in March 2003 as a participant.
- Attendance at the Career Development Retreat sponsored by the Research Career Development Core, Pepper Older Americans Independence Center, February 2004.
- Dr. Schulman-Green regularly attends seminars held by the Yale Program on Aging and the Yale Cancer Center, where she has developed relationships with experienced researchers in end-of-life care, including Drs. Terri Fried and Stanislav Kasl. Dr. Schulman-Green was invited to discuss her work, "Physicians' attitudes and behavior providing palliative care to older adults" at the Program on Aging in April, 2002. She was invited to present her work, "Health Professionals' Self-Reported Palliative Care Practices in Connecticut and Massachusetts" in May, 2003 at the Yale Cancer Center Prevention and Control Conference, and "The RAND Pilot Studies" in December 2003 at the Yale Program on Aging. She was also invited to teach several class sessions to senior nursing students on communication in palliative care at the Yale School of Nursing (Oncology Symptom Management, Living With Dying). In October, she will serve as an invited speaker at the annual conference of the Connecticut Council for Hospice and Palliative Care.

Grant Activities:

Dr. Schulman-Green has had 2 grants funded, both focusing on patients with cancer who are transitioning from curative to palliative care:

- Schulman-Green, D., Principal Investigator. Women's role in the management of advanced breast cancer. Funded by the Yale University School of Nursing Center for Self-Management Interventions for Populations at Risk (NIH, P20).
- Schulman-Green, D., Principal Investigator. Women's role in the management of advanced ovarian cancer. Funded by the Yale University School of Nursing Center for Self-Management Interventions for Populations at Risk (NIH, P30).

An application for a K07 award in Cancer Prevention, Control, Behavioral and Population Sciences Career Development Award, "*Testing a self-guided educational intervention for women with cancer*," was submitted to the National Cancer Institute for June 1, 2005. A second K application is in preparation for submission to the American Cancer Society for October 1, 2005.

3. Dr. Amy L. Kenefick (Appointed October 1, 2002-December 31, 2003). Dr. Kenefick's interests include cognitive function and the quality of life in women with breast cancer. She is transitioning from women's health and geriatrics to breast cancer. Her research training has included orienting herself to breast cancer, and establishing new relationships with other researchers. She has collaborated with Drs. Schulman-Green and Chen of YSN in the preparation of manuscripts related to pain and geriatric oncology. She is a co-investigator with Dr. Tish Knobf in a study of cognitive function and induced menopause related to breast cancer treatment. Dr. Kenefick and Dr. Beth Jones of Yale School of Epidemiology and Public Health are continuing their collaboration with a focus on racial disparities in breast cancer. Dr. Kenefick submitted a nurse investigated proposal to the DOD in late spring, 2003 and it was approved and funded in 2004. The implementation of her study was delayed due to human subjects approval through the DOD but she continues to pilot test her methodological approaches to become competent in cognitive testing. She has assumed a faculty position at the University of

Connecticut and has release time to implement her study. Dr. Kenefick was promoted to Associate Professor with tenure at the University of Connecticut School of Nursing in Spring, 2005. Dr Kenefick continues to attend the pre and post-doctoral meetings.

Reportable Outcomes of Dr. Kenefick

Publications

- Kenefick, A.L., Schulman-Green, D., McCorkle, R. (in press). Decision-making in pain management using the model of sequential trials. *Alzheimers Care Quarterly*. 6(1).
- Kenefick, A.L., (2005). The relationship of neurocognitive function to breast cancer treatment and induced menopause. Proceedings of the Era of Hope Program Department of Defense Breast Cancer Research Program, Philadelphia, PA., p. 329.
- Kenefick, A.L. (2005). Commencement. *International Journal of Human Caring*. 9(1):43-44.
- Kenefick, A.L. (2004). Widows work. *International Journal of Human Caring*. 8(1): 67-68.
- Kenefick, A.L. (2004). Pain Treatment and Quality of Life: Reducing Depression and Improving Cognitive Impairment. *Journal of Gerontological Nursing*. 30(5): 22-29.
- Chen, C., Kenefick, A. L., Tang, S. T., & McCorkle, R. (2003). Utilization of comprehensive geriatric assessment in cancer patients. *Critical Reviews in Hematology/Oncology*, 49, 53-67.
- Jones, B. A., Kenefick, A. L., & Zinggeler, J. M. (under review). Delay, race and stage at diagnosis in women with breast cancer. *American Journal of Public Health*.
- Kenefick, A. L., & Schulman-Green, D. (2004). Caring about pain in cognitively impaired nursing home residents. *International Journal for Human Caring*. 8(2):32-40
- Kenefick, A. L., & Schulman-Green, D. (under review). The Model of Sequential Trials: managing pain in the context of cognitive impairment. *Research in Nursing and Health*.
- Kenefick, A. L., & McCorkle, R. (under review). Patterns of symptom distress in elderly women with breast cancer. *Oncology Nursing Forum*.
- Kenedick, A. L., & Thielen, J. (in preparation). Mild cognitive dysfunction in women with breast cancer.

National Meetings and Presentations

- Researching Symptom Experience Following Surgical Treatment of Breast Cancer, University of Connecticut Health Center, May 19, 2005.
- Patterns of Symptom Distress in Elderly Women with Breast Cancer. Poster, Distinguished Scholars Day, University of Connecticut, April 14, 2005
- Patterns of Symptom Distress in Elderly Women with Breast Cancer. Paper, 17th Annual Scientific Sessions of the Eastern Nursing Research Society, April 8, 2005.
- Relationship of Neurocognitive Function to Breast Cancer Treatment and Induced Menopause, University of Connecticut Health Center, December 16, 2004.
- Relationship of Neurocognitive Function to Breast Cancer Treatment and Induced Menopause, University of Connecticut School of Nursing Advisory Board and University of Connecticut Foundation, October 1, 2004.
- Questioning the Information on Delay and Racial Disparities in Breast Cancer Survival, Paper, Association of Womens Health, Obstetric and Neonatal Nurses Annual Convention, Challenging the Status Quo, June 29, 2004.
- Blaming the Victim? Blaming the System? The Relationship of Delay to Stage of Disease at the Time of Breast Cancer Diagnosis, Poster, Scholars Day, University of Connecticut, April 22, 2004.
- Delay and Racial Disparity in Stage at Diagnosis in Women with Breast Cancer, Paper, 16th Annual Scientific Sessions of the Eastern Nursing Research Society, April 3, 2004.

Ongoing Projects

- Literature review related to cognition and chemotherapy/estrogen/breast cancer/menopause.
- Secondary analysis of breast cancer data included in a larger, randomized, controlled study of advanced practice nursing intervention.

Attended

- YSN post doc meetings
- DOD pre/post doc meetings
- Chronic Illness Journal Club
- Grant Writing for New Investigators (YSN)
- Grant Writing for Experienced Investigators (YSN)
- Cancer Prevention and Control Group Seminars

Grant Funded-2004

"Relationship of Neurocognitive Function to Breast Cancer Treatment and Induced Menopause." Clinical Research Nurse Award, Department of Defense Breast Cancer Research Program, Amy L. Kenefick (PI), \$200,000. This proposal for a clinical nurse research award builds directly on the candidate's extensive clinical background in women's health and primary care by facilitating the candidate's transition from geriatric research to breast cancer research. In addition to preparing the candidate for a career in the battle against breast cancer, it will facilitate interdisciplinary collaboration between the University of Connecticut and Yale University. While providing didactic experience in advanced research, methodology, it allows the candidate to have sustained and varied experiences in the field of breast cancer research and patient care. The training plan will promote the development of the candidate's program of research, leading to advanced skills in research design, data management and analysis, and in working with interdisciplinary research teams to improve outcomes of care for patients with breast cancer.

The area of inquiry for the research aspect of this proposal is the relationship between neurocognitive function, breast cancer chemotherapy, and menopause. A particular emphasis of the training program is on the methodology of longitudinal research, an area that was not included in the candidate's doctoral program. Longitudinal studies are clearly indicated at this point in the development of knowledge about neurocognitive function in women being treated for breast cancer. While there has been some speculation about the role of chemotherapy induced menopause in neurocognitive function, there have been no longitudinal studies with appropriate baseline and repeated measures that will provide meaningful information about neurocognitive status over time. Women, themselves, express distress over perceived neurocognitive changes yet there is little known about the subject. The research project will be valuable preparation for an independent career as a breast cancer researcher not only because it is an opportunity to become an expert in longitudinal research methods but also because it will set the stage for the development of interventions needed to support quality of life in women with breast cancer. The candidate plans to undertake future studies in which interventions are identified and tested. Identifying the contribution of induced menopause to symptom distress in women undergoing treatment will be another fruitful area of inquiry in breast cancer research. This research fits into the larger picture of the problem of adverse breast cancer treatment effects and the quality of life of patients and survivors. Clarifying the relationship of neurocognitive function to chemotherapy and induced menopause will promote the development of treatment protocols in which the probability of cure can be maximized while the extent of neurocognitive dysfunction can be minimized.

4. Dr. Regina S. Cunningham (Appointed November 1, 2003–October 21, 2004). Dr. Cunningham received her PhD from the University of Pennsylvania School of Nursing in June, 2003. Her program of research focuses on clinical outcomes in patients receiving cancer treatment. She is particularly interested in how the work of Oncology Advanced Practice Nurses influences outcomes in patients with hormone dependent malignancies, specifically breast and prostate cancer. Dr. Cunningham limited her training to one year because she was on leave from her position as Chief Nursing Officer at the Cancer Institute of New Jersey. She was recently appointed an adjunct Assistant Professor at the Robert Wood Johnson Institute.

Key Accomplishments of Dr. Cunningham

- Based on data observations made while completing her dissertation, Dr. Cunningham is conducting a secondary analysis examining depression findings from Dr. McCorkle's study of APN outcomes in men who have undergone radical prostatectomy. Data from both experimental and control groups have been obtained and examined. Dr. Cunningham has submitted a manuscript outlining the findings of this work to *Oncology Nursing Forum*.
- Dr. Cunningham has initiated collaborations with Dr. Joanne Robinson (Rutgers College of Nursing) to examine items of the Male-Urinary Distress Instrument that relate to pain. Dr. Cunningham used this instrument as one of the measures in her dissertation research and was interested in further describing the pain experience as it relates to bladder spasms. Dr. Robinson's research focuses on issues of continence. She has been a co-investigator with Dr. McCorkle.
- Dr. Cunningham has completed a literature review and synthesis examining outcomes in patients with early stage breast cancer who have completed treatment. This review examines data based publications only and was conducted to determine gaps in the outcomes research literature and review evidence on psychoeducational interventions in this population.
- Dr. Cunningham is co-investigator with Dr. Tish Knobf in the study *Breast Cancer Survivorship Rehabilitation: Development of an Educational Support Nursing Intervention*. The major goal of this project is to develop an educational-support intervention to improve adaptation and promote self-care for survivors with breast cancer after therapy. Data collection instruments and procedures have been finalized and the Human Subjects application submitted. This study will be conducted at two sites. Dr. Cunningham will facilitate the study implementation at The Cancer Institute of New Jersey.
- Dr. Cunningham has established collaborations with Dr. Benjamin Crabtree and others at the Robert Wood Johnson School of Medicine where she is applying for a faculty position (Assistant Professor level). Dr. Crabtree is a senior investigator; Dr. Cunningham will serve as a co-investigator on a study assessing cancer screening outcomes. A grant has been submitted to fund this work.
- Dr. Cunningham is attending and participating in the biweekly pre- and post-doctoral meetings at Yale School of Nursing, led by Dr. Ruth McCorkle.
- Dr. Cunningham is attending and participating in the Center for Excellence in Chronic Illness Care Journal Club Seminars.

Reportable Outcomes of Dr. Cunningham

Articles:

- Rittenberg, C. N., & Cunningham, R. S. (in press). Chemotherapy induced nausea and vomiting. *Clinical Journal of Oncology Nursing*.
- Cunningham, R. S. (in press). Using clinical practice guidelines to improve clinical outcomes in patients receiving emetogenic chemotherapy. *Oncology Supportive Care Quarterly*.

- Cunningham, R. S. (in press). Clinical Practice guideline Use by Oncology Advanced Practice Nurses. *Applied Nursing Research*.
- Cunningham, R. S. (in press) Therapeutic Options for the Treatment of Cancer-associated Thrombosis: An Overview. *Seminars in Oncology Nursing*, Supplement.
- Cunningham, R. S. (in press). The Role of LMWHs as Supportive Care Therapy in Cancer-Associated Thrombosis. *Seminars in Oncology*.
- Huhmann, M. B. & Cunningham, R. S. (2005). The importance of nutritional screening in the treatment of cancer-related weight loss. *The Lancet Oncology*, May 2005, Vol 6, 334-342.
- Cunningham, R. S. (2004). Advanced practice nursing outcomes: A review of selected empirical literature. *Oncology Nursing Forum*, 31, 219-232.
- Ottery, F. D., Kasenic, S. R., & Cunningham, R. S. (2004). Multimodality approaches to optimize survivorship outcomes: Body composition, exercise, and nutrition. *Issues in Nutrition and Cancer: Update 2004*, March/April, 11-14.
- Cunningham, R. S. (2003). Anemia in the oncology patient: Cognitive function and cancer. *Cancer Nursing*, 26(6S) Supplement, 38-45.

Abstracts:

- Hudson, S. V., Ohman-Strickland, P., Lu-Yao G., Ferrante, J., Cunningham, R. S., Orzano, A. J., & Crabtree, B. F. (in press). Prostate Cancer Screening Patterns in Primary Care Settings. 33rd North American Primary Care Research Group Annual Meeting, October 15-18, 2005 Quebec.
- Cunningham, R. S., & McCorkle, R. (2005) Clinical Practice Guideline (CPG) Use by Advanced Practice Nurses (APNs): An evaluation of consistency and outcome [Abstract]. The 2005 annual Retreat on Cancer Research in New Jersey.
- Cunningham, R. S., Eisenberg, P., Johnson, J. B., Rittenberg, C. N., & Macciocchi, A. (2004). Palonosetron is more effective than Ondansetron or Dolasetron in reducing the impact of chemotherapy induced nausea and vomiting on daily life activities. *Supportive Care in Cancer*, 12, 370.
- Much, J. K., & Cunningham, R. S. (2004). Process and outcome: Utilization of statement on the scope and standards of advanced practice nursing in oncology (3rd edition) for competency based job descriptions, orientation, and evaluation of advanced practice nurses (APNs). *Oncology Nursing Forum*, 31(2), 439-440.
- Cunningham, R. S. Clinical practice guideline use by advanced practice nurses: An evaluation of consistency and outcome. State of the Science in Nursing Research Conference, Washington, DC, October 7-9, 2004.

Book Chapters:

- Cunningham, R. S. (in press). Breast Cancer. In K. Hassey Dow, editor *Nursing Care for Women with Cancer*, 1st ed. Philadelphia: Elsevier.
- Cunningham, R. S., & Huhmann, M. B. (2005). Nutritional disturbances. In C. H. Yarbro, M. H. Frogge, & M. Goodman (Eds.), *Cancer Nursing* (6th ed). Sudbury, MA: Jones and Bartlett Publishers.
- Cunningham, R. S. (2004). The Anorexia-Cachexia Syndrome. In C. H. Yarbro, M. H. Frogge, & M. Goodman (Eds.), *Cancer Symptom Management* (pp. 137-167). Sudbury, MA: Jones and Bartlett Publishers.

Manuscripts in preparation:

- Cunningham, R. S., & McCorkle, R. Depression following radical prostatectomy: A role for advanced practice nurses. *Oncology Nursing Forum*.

- LaCoursiere, S. P., Knobf, M. T., Cunningham, R. S., Erdos, D., Cappiello, M., & McCorkle, R. Internet-based interventions in breast cancer patients: A review of the literature. *Oncology Nursing Forum*.
- Cunningham, R., Robinson, J., & McCorkle, R. Pain and bladder spasms following radical prostatectomy. *Cancer Nursing*.
- Cunningham R. S. Clinical outcomes in women after treatment for early stage breast cancer: A review of selected empirical literature. *Oncology Nursing Forum*.
- McCorkle, R. & Cunningham, R. S. Oncology advanced practice nursing: (manuscript in idea stage of development). *Oncology Nursing Forum*.

Invited Speaker:

- Cunningham, R. S. (2004). Chair, ONS Satellite Symposium – New Advances in Chemotherapeutic and Supportive Care Agents for the Management of Breast Cancer Patients. Anaheim, California.
- Cunningham, R. S. (2004). Managing Symptoms in Patients Receiving Cancer Treatment: A review of empirical evidence. Osaka Prefecture College of Nursing, Osaka, Japan.
- Cunningham, R. S. (2004). Identifying Cancer Related Weight Loss: The Importance of Timely Intervention in Improving Outcomes. Multinational Association for Supportive Care in Cancer 16th International Symposium Miami, Florida
- Cunningham, R. S. Breast Cancer Update International Train the Trainer Program, Sydney Australia, August 7 & 8, 2004.

KEY ACCOMPLISHMENTS OF THE PROGRAM

The following activities were accomplished in the fifth year:

1. Met monthly with core administrative team to plan and complete the work of the training program.
2. Selected trainees for the fourth year and the carry over year based on established criteria.
3. Implemented and continued a structured process for monitoring trainees' progress.
4. Evaluated course work within the School of Nursing doctoral program that included content related to breast cancer research for doctoral students with Yale School of Nursing and other schools within the University to sustain the program.
5. Implemented a long-term plan for recruiting applicants to the doctoral program, including minorities who are committed to studying women with breast cancer
6. Implemented a postdoctoral training program within the School of Nursing and secured funding from NINR for an institutional research training program in self and family management. Recruitment efforts for this program will include applicants who are interested in studying women with breast cancer.
7. Implemented mechanisms for collaboration among program faculty and potential other research and clinical faculty within the University.
8. Identified opportunities for funding trainee's research grants and facilitated submission of their proposals to agencies and foundations.

REPORTABLE OUTCOMES OF THE PROGRAM

The following outcomes were achieved:

1. Filled our one predoctoral and one postdoctoral position yearly with competitive and qualified trainees for the entire funding period. When trainees terminated the program early due to securing their own research funding or research employment opportunities, the positions were filled with other qualified applicants.

2. In addition to the three program directors (McCorkle, Knobf, and DiGiovanni), we recruited Drs. Beth Jones, Elizabeth Bradley, Donald Lannin, and Nora Groce as core faculty in the research-training program.
3. The Connecticut State Department implemented a Cancer Planning grant funded by the Center for Disease Control. Dr. McCorkle continues to serve as a member of the Connecticut Cancer Partnership to implement the plan. The plan was developed in collaboration with the Yale Cancer Center, the University of Connecticut, the State Department of Health, the Connecticut Medical Society, and other key organizations throughout the state. Breast cancer was included as one of the major cancer sites that the state has identified to reduce the burden of cancer. Dr. Knobf was also recently appointed a member of the committee and serves as a program leader on the survivorship core. Dr. McCorkle serves as the program leader on the palliative and end of life core.
4. Dr. McCorkle serves as the co-chair of the American Cancer Society New England's Division Board Outcomes workgroup. This workgroup includes subgroups in breast cancer, quality of life, exercise and nutrition. Drs. Knobf and Jones also serve as members and key collaborators from other institutions have been identified and are receptive to future research initiatives.
5. Dr. Knobf was re-appointed as an American Cancer Society Professor of Oncology Nursing by the New England Division. This is a very prestigious award and there are currently only two professors in the country.
6. Overall the trainees have been extremely productive and have met the requirements of the training program and expectations of the program directors. Eleven new breast cancer researchers have been funded by this training grant. The program has been sustained through an NIH, NINR T32 institutional training grant. Seven breast cancer research studies have been implemented with subsequent funding. Six trainees have received national awards, over 54 presentations have been presented, 45 publications have been published, and 12 grants have been awarded to the trainees. These program outcomes were presented at the DOD Era of Hope meeting in Philadelphia, PA in June, 2005 during the poster session. See Appendix B.

CONCLUSIONS

Within the fourth year of the research-training program in breast cancer, the program directors filled their trainee positions with outstanding applicants. Over the entire training program, six predoctoral and five post-doctoral trainees have been funded and have been extremely productive. Breast cancer content has been included in the curriculum of the doctoral program and will continue to be included after the training program has ended. The postdoctoral program has been established within the School of Nursing and included in the bulletin and the School's website. Additional funding through a T32 application has been secured through June, 2008 to fund both pre and post-doctoral trainees. Faculty across disciplines are collaborating and future initiatives are planned. These activities will enhance our ability to contribute to the knowledge base related to the care of women with breast cancer or women at risk to develop breast cancer.

Table 1
Pre and Post Doctoral Trainees by Years of Appointment and Research

Postdoctoral Trainees

Donna Clemmens, PhD, RN – 2000-2002

Assistant Professor

New York University, Division of Nursing

Adolescents' experiences of living with and communicating about their mothers' breast cancer

Dena Schulman-Green, PhD – 2001-2003

Associate Research Scientist

Yale University School of Nursing

Nurses' communication of prognosis and implications for hospice referral: A study of nurses caring for terminally ill hospitalized patients

Amy Kenefick, PhD, APRN, BC – 2002-2003

Associate Professor

University of Connecticut School of Nursing

Patterns of symptom distress in older women after treatment for breast cancer

Regina S. Cunningham, PhD, RN, AOCN – 2003-2004

Chief Nursing Officer/Director of Ambulatory Services

The Cancer Institute of New Jersey

Transition from treatment to survivorship: Development of an innovative information support intervention

Sheryl LaCoursiere, PhD, RN - 2003-2005

Post Doctoral Trainee

Yale University School of Nursing

Breast cancer patients on-line: A study of demographic characteristics, health status, support, self-efficacy, spirituality, and attitudes toward on-line health care

Predoctoral Trainees

Shiu-yu Lee, DNSc, BS, MSN - 2000-2002

Assistant Professor

National Taipei College of Nursing, Taiwan

Treatment decision-making for the primary treatment of early-stage breast cancer in Chinese American women

Pamela Potter, DNSc, BSN, MA, MSN – 2001-2003

Post Doctoral Fellow

University of Washington

Breast Biopsy and Distress: Testing a Reiki Intervention

Yiyuan Sun, RN, MSN – 2002-2004

4th Year Doctoral Student

Yale University, School of Nursing

Symptom disclosure by Asian women with breast symptoms

Shan Liu, MSN – 2003 - 2005

2nd Year Doctoral Student

Yale University, School of Nursing

Patterns of symptoms in women with cancer after surgery

Emily Haozous, RN, MSN, APRN, BC – 2004

2nd Year Doctoral Student

Yale University, School of Nursing

The pain experience in native Americans

Cindy O'Sullivan, MSN – 2004 – 2005

1st Year Doctoral Student

Yale University, School of Nursing

Quantifying nursing interventions to decrease complications and cost after cancer surgery

APPENDIX A
Yale Cancer Center Grand Rounds Attended by Pre and Post Doctoral Trainees

- January 20, 2004 Ian F. Tannock, MD, PhD, FRCPC
 Daniel E. Bergsagel Professor of Medical Oncology
 Department of Medical Oncology & Hematology
 Ontario Cancer Institute, Princess Margaret Hospital
 The University of Toronto
 Title: "Does Palliative Treatment Palliate? The Influence of Cancer Treatment on Quality of Life for Patients"
- March 9, 2004 Nina Kadan-Lottick, PhD
 Associate Research Scientist, Department of Pediatrics/Oncology
 Yale University School of Medicine
 Title: "Late Effects of Childhood Cancer: After the Cure"
- October 12, 2004 Susan T. Mayne, PhD
 Professor, Department of Epidemiology and Public Health
 Director, Cancer Prevention and Control Research Program
 Yale Cancer Center
 Title: "Antioxidant Nutrients, Oxidant Balance, and Human Cancer: What is the Evidence?"
 "New Treatment of Acute Myeloid Leukemia"
- November 2, 2004 Stephen J. Noga, MD, PhD
 Associate Professor of Oncology and Pathology
 Director, Division of Hematology & Medical Oncology
 Director, Bone Marrow Transplantation & Cellular Therapeutics Program
 Johns Hopkins UniversityMt. Sinai Hospital
 Title: "The Trials and Tribulations of T Cell Depletion of BMT: A Bench to Bedside Story"
- January 11, 2005 David F. Stern, PhD
 Professor and Director of Graduate Studies
 Department of Pathology
 Co-Director, Breast Cancer Research Program
 Yale University School of Medicine
 Title: "Phosphorylation-dependent Protein Interactions in DNA Checkpoint Signaling"
- January 25, 2005 Kevin S. Hughes, MD, FACS
 Surgical Director, Breast Screening, Co-Director,
 Avon Comprehensive Breast Evaluation Center
 Massachusetts General Hospital
 Title: "Is Radiation Therapy Always Needed After Breast Conservation in the Elderly?"
- February 15, 2005 Harold Burstein, MD, PhD
 Assistant Professor of Medicine
 Harvard Medical School
 Staff, Dana-Farber Cancer Center and Brigham & Women's Hospital
 Title: "Optimizing Adjuvant Endocrine Therapy in Post-Menopausal Breast Cancer"

Excellence in Clinical Oncology Lecture Series

February 22, 2005 Roy A. Patchell, MD
Professor of Surgery, Chief of Neuro-Oncology
Division of Neurosurgery
University of Kentucky Medical Center

Title: "New Developments in the Treatment of Spinal Cord Compression Caused by Metastatic Cancer"

March 15, 2005 Michael T. Lotze, MD
Professor of Surgery, MBG, Bioengineering
Director of Clinical and Translational Research
Molecular Medicine Institute
University of Pittsburgh School of Medicine

Title: "Dying Dangerously: Apoptosis, Necrosis, and Cancer"

Excellence in Clinical Oncology Lecture Series

March 29, 2005 Pasquale Patrizio, MD
Professor of Obstetrics & Gynecology
Director, Medical Practice and Yale Fertility Center
Yale University School of Medicine

Title: "How to Preserve Reproductive Capacity After Surviving Cancer"

May 3, 2005 Timothy R. Rebbeck, PhD
Associate Professor of Epidemiology,
Department of Biostatistics and Epidemiology
Senior Scholar, Centre for Clinical Epidemiology and Biostatistics
University of Pennsylvania School of Medicine

Title: "Disease Gene Discovery in the Post-Genome Era"

Iris Fischer Memorial Lecture

March 10, 2005 Paul Drager, JD
Medical Ethics Consultant
State of Connecticut Department of Children & Families,
Medical Review Board, Psychiatric Review Board,
and Institutional Review Boards

Title: "End of Life Medical Decision-Making" Difficult Choices"

June 14, 2005 Debasish Tripathy, MD
Professor of Medicine,
Annette Simmons Distinguished Chair in Breast Cancer Research
Director, Breast Cancer Research Program
Komen/University of Texas Southwestern Medical Center

Title: "New Insights into HER2 Targeted Therapy for Breast Cancer"



Interdisciplinary Research Training in Breast Cancer

Ruth McCorkle, PhD, RN, FAAN, Tish Knobf, PhD, RN, FAAN, Michael Digiovanna, MD
Yale University School of Nursing and School of Medicine, New Haven, CT



Purpose

The purpose of this pre-doctoral and post-doctoral research training program is to prepare clinical researchers who will impact the care of women with breast cancer.

The pre-doctoral program prepares the beginning researcher with the knowledge and skills necessary to develop and test clinical interventions with women diagnosed with breast cancer. This program builds on the Yale University School of Nursing's current doctoral program and other related programs throughout the School of Medicine, including Epidemiology and Public Health.

Post-doctoral training prepares the investigator to conduct more complex studies that involve an interdisciplinary perspective and more sophisticated analytic techniques.

Overview of Program

Each trainee may be appointed for two years and at the completion is able to:

- design and conduct research related to the care of women with breast cancer;
- disseminate research findings to nursing and interdisciplinary audiences; and
- contribute to the knowledge base for the management of women with breast cancer.

Process

- Development of Annual Goals
- Bi-Monthly Multi-Disciplinary Research Seminars
- Weekly Meetings with Trainee and Mentor
- Development and Implementation of Research Study
- Establishment of Mock Review Committee for Grant Submission
- Review Achievement of Goals for Re-appointment
- Dissemination of Research Presentations and Publications

Post-Doctoral Trainees

- Donna Clemmens, PhD, RN - 2000 - 2002
Assistant Professor
New York University, Division of Nursing
Adolescents' experiences of living with and communicating about their mothers' breast cancer
- Dena Schulman-Green, PhD - 2001 - 2003
Associate Research Scientist
Yale University School of Nursing
Nurses' communication of prognosis and implications for hospice referral: A study of nurses caring for terminally ill hospitalized patients
- Amy Kenefick, PhD, APRN, BC - 2002 - 2003
Associate Professor
University of Connecticut School of Nursing
Patterns of symptom distress in older women after treatment for breast cancer
- Sheryl LaCourse, PhD, RN - 2003 - 2005
Post Doctoral Trainee
Yale University School of Nursing
Breast cancer patients on-line: A study of demographic characteristics, health status, support, self-efficacy, spirituality, and attitudes toward on-line health care
- Regina S. Cunningham, PhD, RN, AOCN - 2004 - 2005
Chief Nursing Officer/Director of Ambulatory Services,
The Cancer Institute of New Jersey
Transition from treatment to survivorship: Development of an innovative information support intervention

Pre-Doctoral Trainees

- Shih-yu Lee, DNSc BS, MSN - 2000-2002
Assistant Professor
National Taipei College of Nursing, Taiwan
Treatment decision-making for the primary treatment of early-stage breast cancer in Chinese American women
- Pamela Potter, DNSc, BSN, MA, MSN - 2001 - 2003
Post Doctoral Fellow
University of Washington
Breast Biopsy and Distress: Testing a Reiki Intervention
- Yiyuan Sun, RN, MSN - 2002 - 2004
4th Year Doctoral Student
Yale University, School of Nursing
Symptom disclosure by Asian women with breast symptoms
- Shan Liu, MSN - 2003 - 2005
2nd Year Doctoral Student
Yale University, School of Nursing
Patterns of symptoms in women with cancer after surgery
- Emily Hazzous, RN, MSN, APRN, BC - 2004
2nd Year Doctoral Student
Yale University, School of Nursing
The pain experience in native Americans
- Cindy O'Sullivan, MSN - 2004 - 2005
1st Year Doctoral Student
Yale University, School of Nursing
Quantifying nursing interventions to decrease complications and cost after cancer surgery

Program Outcomes

- Eleven new breast cancer researchers
- Continuation of training program through NIH-T32 mechanism
- Establishment of seven breast cancer research programs with subsequent funding

Post-Doctoral Outcomes

- Five post-doctoral trainees were funded and four have completed the program.
- Drs. Schulman-Green, Clemmens, and Kenefick have assumed faculty positions.
- Dr. Cunningham works as the Chief Nursing Officer at a Cancer Institute.
- Dr. LaCourse is in her second year of the training program and is completing data collection.
- **Productivity**
Awards: 3
Presentations: 40
Publications: 37
Grants Submitted: 13
Grants Funded: 6

Pre-Doctoral Outcomes

- Six predoctoral trainees were funded and two graduated.
- Lee assumed an academic appointment.
- Potter was appointed a post-doctoral fellow at the University of Washington.
- Of the four continuing in the program, Sun is completing her data collection and will graduate May, 2006.
- Hazzous was awarded an individual NRSA and will begin data collection fall, 2005.
- Liu plans to submit her proposal for fall, 2005.
- O'Sullivan is developing her proposal.
- **Productivity**
Awards: 3
Presentations: 14
Publications: 8
Grants Submitted: 7
Grants Funded: 6

Funding

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