

the impact of estrogen receptor (ER) status in breast cancer, the role of inflammation, and subsequent prognosis. Dr. Glynn was invited to present her research on the role of nitric oxide synthase 2 (NOS2) in predicting the prognosis of ER negative breast cancer patients at the Redox Biology Faculty at the University of Nebraska-Lincoln and at the 4th AICC in Dublin. In collaboration with Dr. David Wink of NCI's Radiation Biology Branch and Dr. Stefan Ambs of NCI's Laboratory of Human Carcinogenesis, she is currently increasing her research portfolio to include the role of oxidative stress and inflammation in the remodeling of the tumor microenvironment, with hopes of identifying therapeutic targets for the prevention and treatment of ER negative breast cancer. Dr. Glynn will continue her CFPF research at the NCI through 2009.

In the summer of 2008, Dr. Anderson completed her CFPF fellowship at the Infections and Immunoepidemiology Branch, Division of Cancer Epidemiology and Genetics at the NCI, returning to Northern Ireland to recommence her Research Councils U.K. Fellowship. Dr. Anderson published a wide variety of manuscripts in 2008, with six first author papers in the fields of infection and cancer,

esophageal adenocarcinoma, and Barrett's esophagus, for which she drew heavily upon all-Ireland data. Dr. Anderson is now based as an Academic Fellow in Cancer Prevention in the Cancer Epidemiology and Prevention Research Group at the Centre for Clinical and Population Sciences at QUB. In this capacity, Dr. Anderson will continue to play an important role in cancer research across the island of Ireland.

Two CFPF fellows from 2006-2009, Dr. Brid Ryan from Ireland and Dr. Amanda Black from Northern Ireland, completed their second year of CFPF research and training in 2008.

Dr. Ryan continued her research on the identification of lung cancer stem cells through the study of asymmetric cell division. In addition, she has coordinated several projects focusing on microRNAs and the role that they play in cancer risk. She is specifically addressing how single nucleotide polymorphisms (SNPs) in microRNA binding sites can affect the binding of microRNAs, thus affecting lung cancer risk. Dr. Ryan is also investigating how one of these SNPs can lead to disparities in colon cancer risk among African-Americans and Caucasians.

Dr. Black is involved in the Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial and continues to develop her research interests in cancer prevention and early detection, using the PLCO resource to investigate ovarian and prostate cancer. Dr. Black has published manuscripts in peer-reviewed journals in these areas and has further disseminated her research through poster and oral presentations at targeted conferences.

In autumn 2008, Dr. Paula Hyland, from the CCRCB at QUB, was awarded a CFPF fellowship to conduct cancer prevention research in the U.S. and on the island of Ireland. Dr. Hyland will spend her first year in the program obtaining an MPH degree in the U.K. Clinical Research Centre, Northern Ireland Centre of Excellence in Public Health at QUB, followed by two to three years of research and professional development at NCI. Her research interests include investigating the molecular epidemiology of Barrett's esophagus and esophageal adenocarcinoma.

ADDITIONAL INITIATIVES

In support of the priorities added to the renewed MOU in 2006, the Consortium continued to expand its purview to include palliative care and health economics initiatives. Because these areas of scientific interest are integral to improving the quality and efficacy of cancer care across the island of Ireland, the Consortium sponsored a number of joint programs and events in 2008.

PALLIATIVE CARE

Palliative care is specialized treatment focused on addressing and alleviating the pain associated with physical, emotional, and psychosocial symptoms caused by the



NCI Summer Curriculum in Cancer Prevention "International Day" participants.

advanced stages of disease. Palliative care is not provided to alter or halt the course of serious illness; rather, this form of treatment is intended to improve the patient's quality of life, mitigate suffering, and reduce the overall severity of disease symptoms.

In 2008, the Consortium BOD invited Professor Judith Hill, chief executive officer of Northern Ireland Hospice Care, to serve as palliative care liaison to the SAG. As a result, the Consortium has enhanced its involvement with palliative care activities, working with the scientific committee of the 4th AICC to incorporate palliative care as a prominent area of interest in the break-out sessions of the conference.

In addition, Professor David Clark, visiting professor in hospice studies at TCD and University College Dublin (UCD), introduced a proposal for an All-Ireland Institute for Hospice and Palliative Care in 2007. The Institute is expected to provide comprehensive leadership and coordination for the development of education, research, and policy intelligence in relation to hospice and end-of-life care. Over the course of 2008, Professor Hill and her colleagues from across the island of Ireland worked to prepare a business plan for the proposed Institute. To this end, a cross-border steering group, comprised of representatives from a wide range of disciplines and organizations, was established. The business plan was submitted to a number of potential funders in Ireland, Northern Ireland, and the U.S. and by the end of the year, sufficient funds were pledged to enable the development of a bidding process. The HRB of Ireland, in conjunction with the HSC R&D Office in Northern Ireland, will manage this bidding process in 2009.

With regard to policy development, Professor Hill and her colleagues hope that

the All-Ireland Institute for Hospice and Palliative Care will serve as a platform for sharing the lessons learned in providing palliative care for cancer patients and for developing services to meet the needs of patient groups, their caregivers, and families. It is expected that palliative care specialists in education and service delivery will staff support programs aimed at increasing patient access to end-of-life care and promoting best practices in this area. The Consortium is convinced that the All-Ireland Institute for Hospice and Palliative Care will be instrumental to the success of these objectives.

HEALTH ECONOMICS

The scope of the health economics field centers on a range of issues related to the allocation of health care, the functional quality of respective health care systems, and social and private behaviors impacting health.

In response to the need for expanded research capacity in health economics and cancer policy analysis on the island of Ireland, the HRB and the NCI launched the HRB/NCI Health Economics Fellowships in Cancer Program in January 2008, under the auspices of the Consortium. This four-year PhD development program was designed to encourage successful applicants to pursue careers in health economics in Ireland and Northern Ireland. The fellowship includes ten months of coursework in health economics, cancer prevention, and health policy, based mainly in Ireland, followed by two years of mentored research at an NCI-affiliated host institution in the U.S. or the Netherlands and a final year of mentored research at an affiliated host institution in Ireland.

In June 2008, the HRB/NCI Health Economics Fellowships in Cancer Program reached fruition, awarding two

fellowships to Mr. James O' Mahony and Ms. Rebecca Moore.

Prior to joining the HRB/NCI Health Economics Fellowships in Cancer Program, Mr. O' Mahony participated in a wide range of projects, including macroeconomic modeling, policy reviews, and econometric analyses. Mr. O'Mahony also has an extensive background in demographic modeling; he constructed a model projecting the economic consequences of demographic ageing in Ireland for the Department of Social and Family Affairs. Mr. O'Mahony hopes to use the experience he will gain in the fellowship to enhance the operability of cost-effectiveness models for Irish health service planners and to investigate the appraisal of the primary care physician's role in combating cancer.

Ms. Moore brings to the HRB/NCI Health Economics Fellowships in Cancer Program an impressive range of experience in international relations, survey methodology, and monetary integration analysis. She is particularly interested in examining oncology drugs and non-drug disease interventions from an economic perspective. Ms. Moore wishes to expand her knowledge of health systems research, as it specifically pertains to Ireland. Her ultimate goal is to examine treatment adherence factors, elucidating the patient's role in complying with treatment programs to improve health and reduce the misuse of finite resources.

Additional information about Mr. O'Mahony and Ms. Moore, as well as the HRB/NCI Health Economics Fellowships in Cancer Program, can be found in the "Spotlight on the Consortium Scholars" section of this report.