Published in final edited form as:
J Cancer Educ. 2011 December ; 26(4): 619–625. doi:10.1007/s13187-011-0257-4.

Expanding Cancer Prevention Education to National and International Audiences: The National Cancer Institute's Principles and Practice of Cancer Prevention and Control Annual Summer Course

Jessica M. Faupel-Badger[1,2], **Dana M. van Bemmel**[1,2], **Jonathan S. Wiest**[2], and **David E. Nelson**[1,2]

[1]Cancer Prevention Fellowship Program, National Cancer Institute, Bethesda, MD

[2]Center for Cancer Training, National Cancer Institute, Bethesda, MD

Abstract

The Summer Curriculum in Cancer Prevention has been sponsored by the National Cancer Institute's Cancer Prevention Fellowship Program for over two decades. This curriculum includes a four-week course entitled "Principles and Practice of Cancer Prevention and Control." The ultimate goal of this course is to present the most current cancer prevention research to a diverse workforce of researchers and practitioners eager to address the current challenges in this field. The course covers the current status of cancer prevention research and practice, ranging from epidemiology and clinical practice, and from basic to behavioral science research. It is comprised of lectures grouped into nine modules representing broad and specific topics relevant to cancer prevention. Course participants come from a broad cross-section of career stages, professions, and research interests, and are from across the United States and other countries. Over time and in response to feedback from participants, the course has developed to meet the needs and expectations of this diverse audience, and may serve as a model for those interested in cancer prevention education and training in other countries.

Keywords

international; training; epidemiology; public health

Introduction

In the United States, there are more than 1.5 million new cases, and nearly 600,000 deaths, from cancer each year [1]. Globally, there were 12.7 million persons diagnosed with cancer and 7.6 million cancer deaths in 2008, placing cancer as the leading cause of death worldwide [2]. Approximately 56% of the cases and 64% of the deaths were in developing countries [2]. The number of new cases is expected to reach 16 million by 2020, with 70% occurring in the developing world [3]. Given cancer rates increase with age, and the increasing life expectancy in many countries, there is a growing urgency and need to escalate efforts to prevent cancer.

Corresponding Author: Jessica M. Faupel-Badger, PhD, MPH, National Cancer Institute, Cancer Prevention Fellowship Program, 6120 Executive Blvd (EPS), Suite 150E, MSC 7105, Bethesda, MD 20892-7105, badgerje@mail.nih.gov, phone: 301-402-8806, fax: 301-480-2669.

Despite the enormity of the cancer problem, and research evidence on how to prevent many types of cancer, it is surprising that formal cancer prevention education and training efforts are minimal. In the United States, efforts have been made to increase cancer prevention education in medical schools [4, 5]; however, most efforts are related to screening and offered primarily to medical students. There is limited information on cancer prevention education programs for researchers and other health professionals.

The state of cancer prevention education in most other countries is an especially serious problem. Even if cancer prevention educational efforts in professional and research institutions increased substantially, there is a need to educate the existing global workforce about such topics as screening, health behaviors, and chemoprevention to reduce cancer incidence and mortality. A recent article outlined six key elements for cancer control in Africa [6], although the general framework could be applied more broadly to low- and middle-income countries. Among the six elements were early diagnosis/prevention and education/training. The education and training priorities included a need to reduce the lack of cancer awareness and to increase knowledge and capacity through effective partnerships [6]. An important aim of this element is to create cancer control plans that are evidence-based and sustainable [6], as research shows that lack of cancer prevention education is delaying the development of evidence-based national cancer control plans [6].

The National Cancer Institute's (NCI) Summer Curriculum in Cancer Prevention is trying to help fill this huge gap in cancer prevention education. The course entitled "The Principles and Practice of Cancer Prevention and Control" is an example of a short-term cancer prevention education effort. This broad-based, post-graduate level summer course in cancer prevention research, originally designed for NCI Cancer Prevention Fellows, has expanded to train a larger community. Attendees of the course now include participants from academic, medical, public health, and research institutions across the US and world, in addition to NCI Cancer Prevention Fellows. In this paper, we review information about course design for this diverse audience, selection of participants, evaluation, and suggestions for potential future directions in cancer prevention courses.

Course Background

The NCI's Cancer Prevention Fellowship Program (CPFP), launched in 1986, is a postdoctoral training program bringing individuals from a broad array of health-related disciplines together to focus their talents on cancer prevention research from a public health perspective. The number of fellows who enter the program varies by year, but has ranged anywhere from 5–20 persons. An important educational component of the Fellowship is the summer curriculum in cancer prevention. Originally, the curriculum was taught by CPFP leadership over 3 months, focusing heavily on epidemiology and biostatistics. In 1992, the CPFP began providing Fellows the opportunity to attend an accredited university to attain a Master of Public Health (MPH) degree.

The introduction of the MPH component changed both the focus and duration of the summer course, as such training provided fellows with sufficient epidemiology and statistics training. The summer course curriculum was expanded to include more formal training in cancer prevention, with the goal of summarizing and synthesizing current research across this multidisciplinary field [7]. Additional lectures were incorporated to include the full spectrum of cancer prevention research, including: epidemiological, clinical, social, and behavioral research, with extensive training occurring over several weeks each summer. At about the same time as the change in the NCI's summer curriculum in the early 1990's, the American Association for Cancer Education reported cancer prevention education efforts were limited in medical schools [4]. This need for more broadly accessible cancer

prevention educational opportunities led to the large expansion in the number of course participants over time as well, reaching beyond the Cancer Prevention Fellows to include the greater US and international scientific and practitioner communities (Table 1).

Design of the Principles and Practice of Cancer Prevention and Control Course

The central focus of the course is cancer prevention, which sets this particular training apart from short courses elsewhere that emphasize cancer epidemiology or cancer registry training. The Principles and Practice of Cancer Prevention and Control (hereafter referred to as the "Principles") course is largely taught in a lecture format with three lectures given daily over four consecutive weeks. The lectures are structured to be approximately 60 minutes in length followed by a 30 minute discussion. Two-thirds of the approximately 50 faculty members for the course each year are scientists from the NCI and one-third are from other US-based research institutions.

The Principles course is organized into nine thematic modules and two special presentations. The first module is designed to provide an introduction to epidemiology methods, including considerations when interpreting results from a given study and the level of evidence needed to make inferences about causation. This module is strategically placed so all course participants begin with a shared understanding of epidemiology research as most subsequent presentations refer back to the methods and core principles necessary to conduct these studies.

At the end of the first week, "International Day" occurs. Participants from outside the United States present an overview of cancer and cancer prevention efforts in their home country. Approximately 30 different countries are represented among the Principles course participants each year (Table 1). Cancer control and prevention activities are as varied as the countries the participants represent. This day is truly unique, as it allows for a first-hand discussion highlighting the differing society and cultural beliefs, resources available, and general approaches to cancer prevention. The exchange of information and design of the day also presents an opportunity for participants to network with each other early in the four-week curriculum.

Week two focuses on lifestyle factors related to cancer incidence and screening. This week usually begins with a day focused on occupational and environmental exposures related to cancer incidence. Physical activity, tobacco use, diet, and nutrition research are then featured prominently and have common themes (e.g. assessment, recommendations) which are discussed over the course of these lectures. The week concludes with the "Applications of Cancer Prevention" module which has largely focused on cancer screening, including recommendations and controversies in this area.

Week three consists of a mix of lectures focused on specific primary cancer sites (e.g. breast, lung, colon, and prostate). Topics for this week are cancers with high incidence and/or high mortality and for which there are known preventive measures. Each lecture is designed to discuss recent research advances, as well as information on risk factors, incidence, treatment, and survival for each cancer. Also occurring in week three is a keynote lecture entitled "Annual Advances in Cancer Prevention," held in a large auditorium on the National Institutes of Health (NIH) campus and is open to the entire NIH community. The lecturer is an internationally-recognized scientist in one of the fields of cancer prevention and control; topics have included chemoprevention, survivorship, molecular targets, and care of high-risk individuals (Table 2). Holding this lecture on the NIH campus provides

course participants an opportunity to take a guided tour of several NIH facilities (e.g., the NIH Clinical Center and National Library of Medicine).

The last week of the course finishes with exploring current topics in behavioral and social research, including an emphasis on health disparities. It also includes presentations on ethical and policy implications for cancer prevention research and disseminating information from research studies, given the practical importance of these topics. These lectures are usually among the most highly rated of all course presentations.

The organization of the modules in 2010 is presented in Table 3. This same format is being followed in 2011 with the exception of Module 8 no longer focusing on ethics and law. This module is now entitled, “Cancer Prevention Research: Multiple Perspectives,” and features community-based participatory research, complementary and alternative medicine, and other disciplines that contribute to cancer prevention research. The topics grouped in this module are not new to the field of cancer prevention and control but are new additions to the Principles course.

Although selected talks in the Principles course address some current advances in laboratory research, beginning in 2000 an additional one-week course was added to the curriculum (Molecular Prevention) to focus solely on the molecular underpinnings of cancer biology and prevention. More information on this course can be found at the course website (https://cpfp.cancer.gov/summer/summer.php).

Course Participants

With the combined attendance of NCI Cancer Prevention Fellows, domestic, and international participants, the course has grown to approximately 90 participants each year. The course is limited to this size as a maximum due to available meeting space for a four-week course and funding. In most recent years, approximately 50% of the attendees have been international participants, mostly from low- and middle-income countries who receive financial support from the NCI to cover some of their travel-related expenses (Table 1). Applications from individuals in high-income countries are encouraged with the understanding no financial support will be provided by the NCI. The remaining 50% of the class is divided between US participants (35% of total) and the NCI Cancer Prevention Fellows (15% of total).

Selection of Participants

Applicants for the course must submit a curriculum vitae and letter of nomination from a supervisor. International applicants must also include a statement of English proficiency. Each year, there are more applicants than can be accommodated in the course. Acceptance is determined by CPFP leadership and selection is based on who is in the best position to put the course information received into practice. Preference is given to individuals with MD, PhD, and/or MPH level training. The prerequisites of having education or experience in epidemiology, biostatistics, and/or cancer biology also are recommended.

Participants in the course are most often PhD recipients. MD recipients are approximately 30% of the attendees. A greater proportion of the international participants are MDs or have an equivalent degree (average 59%), whereas the majority of US participants have PhD degrees (average 61%).

CPFP Fellows and Domestic Participants

From 1986–1991, the attendees of the summer course were only the NCI Cancer Prevention Fellows and a limited number of NCI/NIH Staff (Table 1). Cancer Prevention Fellows are required to attend the summer curriculum in cancer prevention during the first year of their training at NCI. Beginning in 1992, attendance at the course increased as participants from across the US were selected to attend (Table 1). US participants include scientists from diverse backgrounds and career stages ranging from those who are beginning careers in cancer prevention research to more established scientists looking to incorporate cancer prevention into their research portfolios. Recent recipients of NCI career development "K" awards who have included this curriculum as part of the training plan in their applications also attend the course.

International Participants

The CPFP, in partnership with the NCI Office of International Affairs (OIA), formally began accepting applications from international participants in 1998 (Table 1). These efforts were further expanded in 2007, when the NCI partnered with the International Atomic Energy Association's (IAEA) Programme of Action for Cancer Therapy (PACT) to expand cancer treatment and prevention efforts in low- and middle-income countries. As part of this partnership, the NCI Summer Curriculum in Cancer Prevention was opened to applicants from low- and middle-income countries nominated via IAEA-PACT. IAEA-PACT participants are nominated from across all IAEA member states (151 as of November 2010 - http://www.iaea.org/About/Policy/MemberStates/index.html).

NCI's OIA has placed an emphasis on recruiting individuals from low- and middle-income countries to attend the course and has provided financial support to offset living expenses and accommodations for the duration of the course. The overall emphasis on international participants from low- and middle-income countries centers on the growing cancer burden and relatively few individuals in these areas who have training in cancer prevention and control efforts. OIA also strives to maintain geographic balance across the international participants in the course, with Eastern Europe, the Middle East, Africa, Asia, and Latin America represented equally among OIA's portfolio from 1998–2011.

A limited number of scholars from the Republic of Ireland and Northern Ireland also attend the NCI Summer Curriculum in Cancer Prevention, including both the Principles and Molecular Prevention courses. This arrangement is part of the memorandum of understanding NCI signed in 1999 with representatives from health and research agencies in Ireland and Northern Ireland to form the Ireland-Northern Ireland-National Cancer Institute (NCI) Cancer Consortium. The mission of the consortium is to, "lessen the burden due to cancer across the island of Ireland through cross-border collaborations in cancer research and education [8]." Between 2002–2009, 115 participants from the island of Ireland attended the Principles course [8]. More information on the consortium can be found at their website (http://www.allirelandnci.com/index.asp).

Evaluation

Evaluation efforts include participant assessment of each individual speaker conducted the same day as the presentation. The evaluation instrument contains structured (rated using a Likert scale from 1 [lowest] to 5 [highest]) and open-ended questions. Key elements for rating the individual speakers include: 1) appropriateness of topic to cancer prevention and control; 2) comprehensiveness of the lecture content; and 3) the speaker's ability to convey information. Summary evaluations are shared with presenters. They are encouraged to incorporate feedback from the evaluations, if necessary, and to update their lectures for the

next year to ensure their information reflects the current state of knowledge in their field. In addition, evaluations are used by NCI CPFP Staff to make adjustments to the syllabus for the following year. Table 3 presents the overall scores for each module in 2010. These scores were calculated by averaging the summary score for each individual speaker in that module. The number of speakers and the average number of evaluations returned across all speakers in each module are reported in Table 3. All modules were rated very highly, with Behavioral Science and Community Interventions, Application of Cancer Prevention Methods, Disseminating Scientific Knowledge, and Epidemiology, Prevention, and Control of Site-Specific Tumors being rated slightly more favorably.

Prior changes made in response to the evaluations include shortening the length of the Principles course and adding the previously mentioned Molecular Prevention Course. Recent modules on “Ethics, Law, and Policy in Cancer Prevention and Control” and “Health Disparities and Special Populations” were added based on feedback from participants and because of growing recognition that these areas had become more prominent in cancer prevention and control.

In 2010, the first overall evaluation/end-of-course survey was conducted. All course participants were provided the survey, of whom 34 completed it. The responses were anonymous thus we were unable to assess if bias was introduced by who returned the survey. Respondents gave the course an overall highly positive rating of 4.5 out of 5 (standard deviation +/− 0.56), using a Likert scale from 1 (lowest) to 5 (highest). One hundred percent of the respondents would recommend the course to their colleagues and 92 % indicated the course met or exceeded their expectations.

Recently, NCI’s OIA conducted follow-up evaluations of participants from low- and middle-income countries supported by this office to attend the course from 1998–2009 and course participants from the Ireland-Northern Ireland-National Cancer Institute Cancer Consortium from 2002–2009. Manuscripts detailing these evaluations are currently in preparation. Overall, there was high satisfaction in the course and many international participants reported subsequent career outcomes that included a focus on cancer prevention (e.g. publications, grants, presentations, collaborations; personal communication, Joe Harford, PhD).

Discussion

Two decades after the start of this broad-based, post-graduate course in cancer prevention research, the Principles Course continues to be timely and fill a need. For NCI’s Cancer Prevention Fellows who are beginning their careers toward becoming independent researchers and leaders (the original target audience for the course), it provides foundational knowledge and information. For domestic and international participants, the course provides a review of the state of the science in cancer prevention research across multiple areas and disciplines. Of note is that many international participants hold positions in the policy or government realm and have recently been given the responsibility to develop a cancer control plan for their home country, whereas others have recently had cancer control activities added to their portfolios (historically, their work has long focused on infectious disease).

In addition to the comprehensive didactic coursework in cancer prevention research, participants have the opportunity to benefit from a number of different networking opportunities. Participants may chose to use the time at NCI to meet with NCI Staff regarding mutual research interests, establishing long-distance collaborations. In a few instances, attendees have returned to the NCI in Visiting Fellow positions to work with

research groups on-site or applied to the NCI to become Cancer Prevention Fellows. Many participants maintain contact with each other, developing an international network of colleagues interested in cancer prevention.

Future directions for the course include incorporating more interaction among the participants into the syllabus. In 2011, we will foster more active learning in the course by piloting small group discussion sessions throughout the four weeks. These discussions will focus on key developments and challenges in the fields of cancer prevention and control. Additional topics under consideration are diversifying the site-specific cancers module to include cancers that are more prevalent in low- and middle-income countries, health economics as it relates to cancer prevention efforts, and community-based participatory research.

We also are considering how to make the lectures more accessible remotely, such as posting selected lectures and other materials on NIH websites. CPFP staff members also have been approached about considering whether a version of the Principles course could be delivered in international settings, perhaps on a regional basis. It may be worthwhile to have a regional group receive this training together. Further consideration also could be given to distance learning adaption of this course, including web-based tutorials. Although the logistics of offering this course in-person and off-site are daunting, CPFP staff members are available to discuss the technical aspects of implementing a similar cancer prevention education effort with others considering this either in the US or internationally.

In conclusion, a recent compilation looking back at the progress of cancer prevention efforts from 1727 to the present demonstrated successful advances in the field resulted from collaborative, multidisciplinary efforts [9]. Furthermore, papers focusing on the future of the cancer prevention workforce highlighted the need for cancer prevention curricula to train a broad group of individuals to build on these historic advances and to bring new disciplines into the fields of cancer prevention and control [10, 11]. The “Principles and Practice of Cancer Prevention and Control” course is helping to meet this charge by contributing to the training of a network of individuals both nationally and worldwide who represent a diverse workforce eager to address the current challenges of cancer prevention research.

Acknowledgments

We would like to thank past CPFP Staff members Ms. Barbara Redding and Dr. Douglas L. Weed for insightful discussions about the summer course and for maintaining detailed records on course format and attendance since its inception and Ms. Studly Auguste, a current CPFP Staff member, for her efforts to make the summer course a success. We also thank members of NCI’s Office of International Affairs (OIA), Drs. Joe Harford and Makeda Williams and Ms. Isabel Otero, who discussed the history of OIA’s involvement with the course and their follow-up efforts of international course participants with us. Lastly, we thank NCI leadership for their continued support of the Summer Curriculum in Cancer Prevention.

References

1. American Cancer Society. Cancer Facts and Figures 2010. Atlanta: American Cancer Society; 2010.
2. Jemal A, Bray F, Center MM, Ferlay J, Ward E, Forman D. Global cancer statistics. CA Cancer J Clin. 2011 caac.20107 [pii]. 10.3322/caac.20107
3. Kerr DJ, Midgley R. Can we treat cancer for a dollar a day? Guidelines for low-income countries. N Engl J Med. 2010; 363(9):801–3.10.1056/NEJMp1002812 [PubMed: 20818843]
4. Chamberlain RM, Bakemeier RF, Gallagher RE, Kupchella CE, O’Donnell JF, Parker JA, Hill GJ, Brooks CM. Cancer prevention education in United States medical schools. Cancer Education Survey II: cancer education in United States medical schools. J Cancer Educ. 1992; 7(2):105–14. [PubMed: 1419575]

5. Dajani Z, Geller AC. Cancer prevention education in United States medical schools: how far have we come? J Cancer Educ. 2008; 23(4):204–8. 906362521 [pii]. 10.1080/08858190802188552 [PubMed: 19058066]

6. Lingwood RJ, Boyle P, Milburn A, Ngoma T, Arbuthnott J, McCaffrey R, Kerr SH, Kerr DJ. The challenge of cancer control in Africa. Nat Rev Cancer. 2008; 8(5):398–403. nrc2372 [pii]. 10.1038/nrc2372 [PubMed: 18385682]

7. Husten CG, Weed DL, Kaluzny AD. Training researchers in cancer prevention and control: a description and evaluation of NCI's Cancer Prevention Fellowship Program. J Cancer Educ. 1993; 8(4):281–90. [PubMed: 8186080]

8. Ireland-Northern Ireland-National Cancer Institute Cancer Consortium. All-Ireland Cancer Consortium Annual Activities Report 2009: Transcending Borders for Better Health: Empowering the Future Through Research, Education, and Care. 2010.

9. Lippman SM, Hawk ET. Cancer prevention: from 1727 to milestones of the past 100 years. Cancer Res. 2009; 69(13):5269–84. 0008-5472.CAN-09-1750 [pii]. 10.1158/0008-5472.CAN-09-1750 [PubMed: 19491253]

10. Blazer KR, Clague J, Collie CL, Ciadella-Kam LA, Kuratani DG, Laird SL, Sabado P, Warren KJ, Chang S. "Future directions in cancer prevention and control: workforce implications for training, practice, and policy" symposium, October 17 to 18, 2009, The University of Texas M. D. Anderson Cancer Center. Cancer Epidemiol Biomarkers Prev. 2010; 19(6):1655–60. 1055-9965.EPI-10-0441 [pii]. 10.1158/1055-9965.EPI-10-0441 [PubMed: 20501765]

11. Chang S, Collie CL. The future of cancer prevention: will our workforce be ready? Cancer Epidemiol Biomarkers Prev. 2009; 18(9):2348–51. 1055-9965.EPI-09-0664 [pii]. 10.1158/1055-9965.EPI-09-0664 [PubMed: 19723910]

Table 1

Number of Participants in NCI Summer Course[a] 1986–2011

Year	CPFP Fellows	US Participants	International Participants	Yearly total
1986	3	21	--	24
1987	4	17	--	21
1988	6	15	--	21
1989	3	13	--	16
1990	8	14	--	22
1991	2	18	--	20
1992	6	36	--	42
1993	6	34	5	45
1994	8	37	0	45
1995	7	19	3	29
1996	4	40	6	50
1997	7	47	8	62
1998	7	32	9	48
1999	11	23	16	50
2000	12	54	9	75
2001	14	19	32	65
2002	13	29	29	71
2003	15	28	34	77
2004	19	27	35	81
2005	12	23	32	67
2006	15	35	47	97
2007	7	9	53	69
2008	6	19	49	74
2009	10	12	54	76
2010	11	27	48	86
2011	14	24	52[b]	90
Totals	230	672	521	1423

[a] Summer Course includes the “Principles and Practice of Cancer Prevention and Control” Course (2000–2011), and formerly the Cancer Prevention and Control Academic Course (1986–2000)

[b] Countries represented by 2011 Course Attendees: Albania, Brazil, Canada, Chile, Egypt, El Salvador, Ghana, India, Indonesia, Northern Ireland, Republic of Ireland, Israel, Jordan, Kenya, Republic of Korea, Malaysia, Mauritania, Mexico, Republic of Moldova, Mongolia, Montenegro, Morocco, Namibia, Nepal, Nicaragua, Nigeria, Senegal, Serbia, Singapore, Sri Lanka, Tanzania, Turkey, United Kingdom, United States, Viet Nam, Yemen, Zambia, Zimbabwe

Table 2

Annual Advances in Cancer Prevention Lecturer (2000–2011)

Year	Speaker	Speaker's Institution	Title of Lecture
2000	Bernard Levin, MD	University of Texas M.D. Anderson Cancer Center Houston, TX	Cancer Prevention: What is the Future?
2001	Frederick P. Li, MD	Dana-Farber Cancer Center Boston, MA	The Identification and Care of Those at Highest Risk of Cancer
2002	Leslie Bernstein, PhD	University of Southern California, Los Angeles, CA	Cancer Prevention Opportunities for Action
2003	Elio Riboli, MD, ScM, MPH	International Agency for Research on Cancer Lyon, France	Cancer Prevention: A European Perspective
2004	Waun Ki Hong, MD	University of Texas M.D. Anderson Cancer Center Houston, TX	Convergence of Molecular Targets for Cancer Prevention and Therapy
2005	John Potter, MBBS, PhD	Fred Hutchinson Cancer Research Center, Seattle WA	What We Know and Don't Know about Colorectal Neoplasia
2006	Frank L. Meyskens, Jr, MD	University of California Irvine, CA	The Promise and Perils of Clinical Chemoprevention 1980–2030
2007	Barnett S. Kramer, MD, MPH	National Institutes of Health Bethesda, MD	Cancer Prevention: Distinguishing Strength of Evidence from Strength of Opinion
2008	Patricia Ganz, MD	University of California Los Angeles, CA	Cancer Survivors: Charting an Agenda for Research, Treatment, and Quality of Care
2009	Olufunmilayo F. Olopade, MD	University of Chicago Chicago, IL	Clinical Cancer Genetics and Prevention
2010	Andrea De Censi, MD	E.O. Ospedali Galliera Genova, Italy	Cancer Prevention Therapy Accomplishments and Challenges
2011	Judith MacKay, MBChB, FRCP (Edin), FRCP (Lon)	World Lung Foundation and Asian Consultancy on Tobacco Control, Hong Kong, China	Cancer Control – A Look at the Future
	Additional international lecturers:		
2007	Fenton Howell, MBBCh, MPH, FRCPI	Health Service Executive Dublin, Ireland	Ireland Smoking Ban
2010	David Forman, PhD	International Agency for Research on Cancer Lyon, France	Cancer Registries

Table 3

Principles and Practice of Cancer Prevention and Control 2010 Course Modules

Module	Title	# of speakers	# of evaluations returned [a]	2010 Overall Score [b]	Standard Deviation
Module 1:	Introduction to the Cancer Problem	11	52	4.41	0.23
International Day:	Cancer Prevention: An International Perspective			N/A	
Module 2:	Occupational and Environmental Exposures in Cancer	3	49	4.36	0.16
Module 3:	Diet, Physical Activity, and Cancer Prevention	8	43	4.49	0.16
Module 4:	Applications of Cancer Prevention	3	47	4.69	0.23
Module 5:	Epidemiology, Prevention, and Control of Site-Specific Tumors	13	33	4.56	0.21
Special Lecture:	Annual Advances in Cancer Prevention			N/A	
Module 6:	Behavioral Science and Community Interventions	7	33	4.73	0.15
Module 7:	Health Disparities and Cancer Prevention in Diverse Populations	3	63	4.24	0.22
Module 8:	Ethics, Law, and Policy in Cancer Prevention and Control	3	20	4.45	0.36
Module 9:	Disseminating Scientific Knowledge	3	36	4.61	0.28

[a] Number of evaluations reported is the average number returned across all speakers in the module.

[b] Range 1–5, with 5 being highest score; module scores averaged over summary evaluations for each individual speaker in module. International Day and Annual Advances Special Lecture not included in evaluation.