The Breast Health Global Initiative

Report from the The Breast Health Global Initiative

2008

FRED HUTCHINSON CANCER RESEARCH CENTER
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SUSAN G. KOMEN FOR THE CURE

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Report from the The Breast Health Global Initiative

2008

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MISSION: The BHGI, co-founded and co-sponsored by the **Fred Hutchinson Cancer Research Center** and **Susan G. Komen for the Cure**, has a mission to **develop**, **implement** and **study** evidence-based, economically feasible, and culturally appropriate Guidelines for International Breast Health and Cancer Control for low- and middle-income countries (LMCs) to improve breast health outcomes.

Report from the The Breast Health Global Initiative

From left: Leslie Sullivan, BHGI Senior Program Manager; Benjamin O. Anderson, BHGI Chair and Director; Joe Harford, Director, NCI Office of International Affairs and BHGI Executive Committee member; U.S. Ambassador to Hungary, the Honorable April Foley; Gabriel N. Hortobágyi, Immediate past president ASCO and BHGI Executive Committee Chairman, at Global Summit reception in Budapest.

This report summarizes BHGI accomplishments in clinical guideline development over the previous six years, reviews activities and outcomes of the 2007 global summit, and prior summits; and outlines a 5-year plan to achieve guideline implementation.

Guideline Implementation Begins

The Breast Health Global Initiative (BHGI) held the third in an ambitious series of three biennial invitation-only working meetings in October 2007 to successfully complete development of the publication sequence of clinical breast health guidelines for "best practices with limited resources" in low- and middle-income countries (LMCs).

The **Global Summit on International Breast Health–Implementation** ("summit") in Budapest, October 1-4, hosted by the **American Society of Clinical Oncology (ASCO)**, was the culmination of the tripartite six-year series that defined evidence- based and resource-stratified consensus clinical breast health guidelines for LMCs. The meeting marked a turning point and new beginning as the BHGI organizational focus turns from guidelines development to their implementation.

2007 GLOBAL SUMMIT SUMMARY

OPENING

The BHGI summit in Hungary opened with **Gabriel N. Hortobágyi**, immediate past-president of ASCO, welcoming 100 breast cancer and global health experts from 40 countries who had gathered to collaborate in the publication. Hortobágyi, BHGI Steering Committee Chair—and a native Hungarian—introduced the BHGI summit mission, "The work to be done at the summit—developing clinical *Guidelines for International Breast Health and Cancer Control–Implementation*, defining key implementation issues—is an ambitious, important step to improve health care delivery systems in practice standards and research on a global scale and to address the unique cultural and social considerations in the regions around the world."

The Hungarian Minister of Health, **Ágnes Horváth**, officially welcomed and praised the BHGI invited experts. "The Breast Health Global Initiative organization is just five years old, yet what it has accomplished and what you endeavor now is critical for developing countries, such as my country, to make lasting improvements in health care delivery."

Gabriel N. Hortobágyi,
BHGI Executive Committee Chair

Hungarian Minister of Health, Ágnes Horváth

> "As our foundational working meeting, the global summit has created the groundwork for development of these clinical guidelines."
>
> — Benjamin Anderson

The meeting was chaired by BHGI founder, chair and director, **Benjamin O. Anderson**, who noted that Ministers of Health play a key role in implementing health care guidelines, and are considered one of the important audiences for the BHGI publications. "While experts are needed to establish guidelines, ministers of health and policy makers are critically important in supporting, establishing priorities, and allocating resources for implementation."

The participating experts from developing and developed nations included key opinion leaders and specialists in science, medicine, advocacy, policy, public health, metrics, health communications and education, as well as BHGI organizational partners and collaborators.

Anderson spoke about the importance of next steps for the BHGI: "As our foundational working meeting, the global summit has created the groundwork for development of these clinical guidelines. Our collaboration has become a vibrant alliance of organizations and individuals throughout the world, made possible by BHGI partners and collaborators. Development of these guidelines now marks the completion of the publication series and beginning of a five-year plan going forward. It will be a critical phase to coalesce our efforts, to realize our mission of guideline implementation to improve breast cancer care and survival of the most common cancer among women throughout the world."

The outcome of the summit, *Guidelines for International Breast Health and Cancer Control–Implementation*, is slated for publication in the fall in *Cancer*.

Stephen F. Sener, Past President, American Cancer Society, USA, and Diagnosis Panel Co-Chair

Treatment Panel members, from left: Zeba Aziz, Pakistan; Baffour Awuah, Ghana; Nagi Khouri, USA

SUMMIT PARTICIPANT COUNTRIES

The following countries were represented at the summit, representing five continents—Africa, Asia, Europe, North America, Latin America.

Country	Region	Income group*
1. Algeria	Middle East & North Africa	Lower middle income
2. Argentina	Latin America & Caribbean	Upper middle income
3. Austria		High income: OECD**
4. Brazil	Latin America & Caribbean	Lower middle income
5. Canada		High income: OECD
6. Chile	Latin America & Caribbean	Upper middle income
7. China	East Asia & Pacific	Lower middle income
8. Colombia	Latin America & Caribbean	Lower middle income
9. Cuba	Latin America & Caribbean	Lower middle income
10. Egypt, Arab Rep.	Middle East & North Africa	Lower middle income
11. France		High income: OECD
12. Ghana	Sub-Saharan Africa	Low income
13. Greece		High income: OECD
14. Hungary	Europe & Central Asia	Upper middle income
15. India	South Asia	Low income
16. Indonesia	East Asia & Pacific	Lower middle income
17. Israel		High income: nonOECD
18. Italy		High income: OECD
19. Japan		High income: OECD
20. Jordan	Middle East & North Africa	Lower middle income
21. Kenya	Sub-Saharan Africa	Low income
22. Lebanon	Middle East & North Africa	Upper middle income
23. Malaysia	East Asia & Pacific	Upper middle income
24. Mexico	Latin America & Caribbean	Upper middle income
25. Nigeria	Sub-Saharan Africa	Low income
26. Norway		High income: OECD
27. Pakistan	South Asia	Low income
28. Romania	Europe & Central Asia	Upper middle income
29. South Africa	Sub-Saharan Africa	Upper middle income
30. Sweden		High income: OECD
31. Switzerland		High income: OECD
32. Tanzania	Sub-Saharan Africa	Low income
33. Turkey	Europe & Central Asia	Upper middle income
34. Uganda	Sub-Saharan Africa	Low income
35. Ukraine	Europe & Central Asia	Lower middle income
36. United Arab Emirates		High income: nonOECD
37. United Kingdom		High income: OECD
38. United States		High income: OECD
39. Uzbekistan	Europe & Central Asia	Low income

*The economic/income groupings are based on the World Bank list of economies (July 2006). (Taiwan is not included in World Bank listings).
**OECD: Organization for Economic Cooperation and Development

SUMMIT PANELS

1. Early Detection 2. Diagnosis 3. Treatment 4. Health Care Systems

PANELS

The BHGI scientific committee selected eight co-chairs for the four consensus panels on early detection, diagnosis, treatment, and health care systems, and defined each panel's focus, with key presentation topics (a total of 24 topics).

The panels were charged with reviewing the 2005 BHGI Guidelines, updating indicators if needed, and expanding the guidelines to include evaluation and quality indicators with a focus on implementation.

To set the tone for each day, panels began with presentations on innovative advocacy at work in the real world. Breast cancer advocates from India, Greece, Ukraine and Kenya, presented on their pioneering efforts in mobilizing local forces in their countries to elevate public awareness and improve breast cancer early detection and availability of treatment.

Each day-long panel grappled with core questions of guideline implementation, grounded in BHGI Guideline principles that health care delivery must be addressed at all levels of care and economic resources (for basic, limited, enhanced and maximal) in geographically and culturally diverse LMCs. The scientific presentations and talks on BHGI-pilot research projects led to vigorous consensus dialogue and debate on specific issues in early detection, diagnosis, treatment and health care systems as related to cancer care delivery.

Paula Reiger, Oncology Nursing Society, USA, and advocate Rama Sivaram, India, Treatment Panel

Early Detection Panel: Day One

The Early Detection-Implementation Panel was led and co-chaired by **Cheng-Har Yip** and **Robert A. Smith**. Dr. Yip is a professor and head of the Department of Surgery at the University of Malaya Medical Center in Malaysia. Dr. Smith is the Director of Cancer Screening for the American Cancer Society, USA, seated center with panel. **Early Detection Panel Members:** Eng-Suan Ang, MBBS, MPH (Reproductive Health Consultant, Malaysia); Stanley Anyanwu, MBBS (Surgery, Nigeria); Rosemary Caffarella, PhD (Education, USA); Marilys Corbex, PhD (Epidemiology, World Health Organization, Egypt); Alla Kovtun (Advocate, Ukraine); Gary Kreps, PhD (Public Health Communications, USA); Anne McTiernan, MD, PhD (Cancer Prevention, USA); Anthony Miller, MD, FRCP (Epidemiology, Canada); Raul Murillo, MD, MPH (Epidemiology, Colombia); Victor Myakynkov, MD (Radiology, Ukraine); Lennarth Nyström, PhD (Epidemiology, Sweden); Vahit Özmen, MD (Surgery, Turkey); Larissa Remennick, PhD (Sociology, Anthropology Chair, Israel); Christy Russell, MD (Medical Oncology, USA); Stephen F. Sener, MD (Surgeon, USA); Cecilia Sepulveda, MD, MPH (World Health Organization, Switzerland); Surendra Shastri, MBBS, DPh, MD (Preventive Oncology, India); David Thomas, MD, Dr PH (Epidemiology, USA)

Alla Kovtun, a leading Ukrainian advocate began the first day's proceedings reporting on the work of the National Federation of Breast Cancer Survivors in the Ukraine, highlighting how breast cancer survivors can play an important role in breast cancer awareness programs. **Rosemary Caffarella**, International Professor of Education from New York, spoke on barriers to educating women about breast cancer in developing countries. **Anne McTiernan**, a prevention expert from the Fred Hutchinson Cancer Research Center in Seattle, presented evidence on primary prevention of breast cancer through lifestyle changes, diet and western lifestyle and the potential impact that modification of these risk factors could play in breast cancer in countries at all economic levels. **Gary Kreps**, Director of the Center for Health and Risk Communication at George Mason University in Virginia talked about innovative development of educational resources and communication tools for breast health awareness and early detection. He outlined communication issues regarding the promotion of detection and screening strategies using multi-staged and layered approaches, pointing out that our guideline dissemination strategies warrant research in and of themselves.

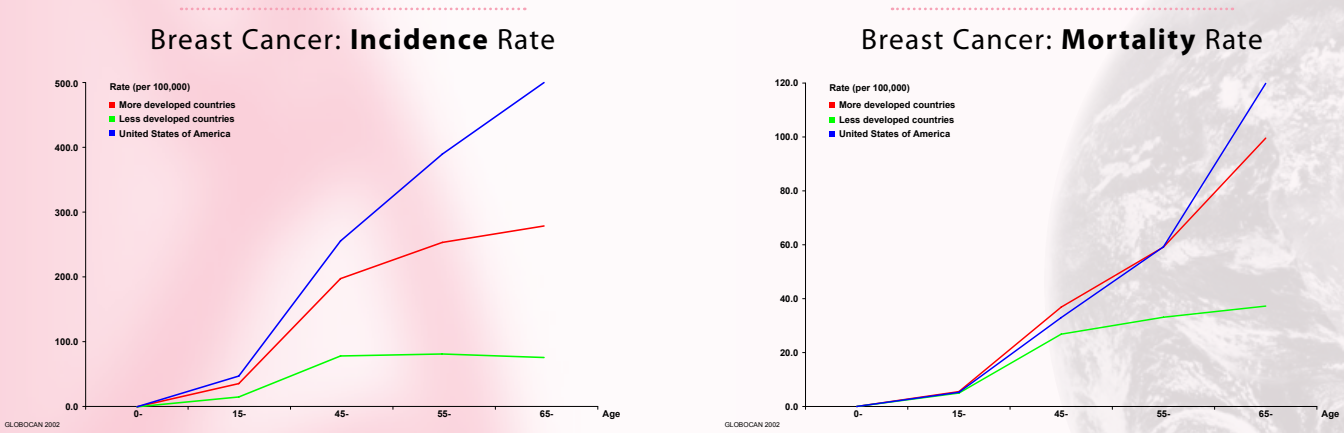

Figure 1. Age-specific breast cancer A) incidence and B) mortality in the United States, more developed countries and less developed countries. Differences in breast cancer incidence between more developed and less developed countries are greatest in older (postmenopausal) women, but breast cancer mortality is very similar for women under age 50.

Eng-Suan Ang, from Malaysia, presented on her training module on eliciting male support for breast cancer screening in male dominated societies where direct communication with women is difficult or is not widely accepted within some cultures. On behalf of the Chinese Anti-Cancer Association, **Stephen F. Sener**, former American Cancer Society president, and co-chair of the diagnosis panel on implementation, presented on behalf of the Chinese Million Woman Screening Program of mobile digital web-based detection ultrasound and mammography. Practical applications for breast self-awareness, clinical breast examination and breast ultrasound in screening and early detection of breast cancer was presented by **Anthony Miller**, of Canada, specifically focusing on early detection in the absence of widespread screening mammography, including a report on the ongoing Cairo Breast Screening Trial. **Raul Murillo**, a BHGI Project PI, discussed his BHGI research project on breast cancer early detection programs in Colombia. This project is supported by the Colombian National Cancer Institute and Ministry of Health and is being initiated in the Colombian health system.

Diagnosis Panel: Day Two

The Diagnosis Panel focused on clinical examination, imaging and laboratory tests. The panel considered evaluation goals and metrics to bring the 2005 BHGI guidelines to the next stage of implementation. A separate Breast Pathology Focus Group concentrated on the key components of pathology diagnosis.

While accurate diagnosis is the lynchpin of breast cancer care, it must be framed by effective early detection and appropriate treatment. **Mary Onyango** from Kenya presentation on a pilot project in Kenya that illustrates the need for breast cancer programs to incorporate all three components of care, as each component of care is dependent on the others. Screening programs must consider the available diagnostic

The Diagnosis-Implementation Panel was led and co-chaired by **Roman Shyyan**, MD, and **Stephen F. Sener**, MD. Dr. Shyyan is a surgeon-oncologist at the Lviv Regional Cancer Center in the Ukraine. Dr. Sener is the vice chairman of the Department of Surgery at Evanston Northwestern Healthcare, a division of the Northwestern University Feinberg School of Medicine and former President of the American Cancer Society (2004-2005), USA, seated center with panel. **Diagnosis Panel members:** Gaurav Agarwal, MBBS, MS (Surgery, India); Justus Apffelstaedt, MD, FCC(S), MBA (Surgery, South Africa); Nuran Bese, MD (Radiation Oncology, Turkey); Maira Caleffi, MD, PhD (Oncology Brazil); Roshan Farokh Chinoy, MBBS, MD (Pathology, India); Kathleen Errico, PhD, ARNP (Nurse Practitioner, Educator, USA); Leticia María Fernández Garrote, PhD (Epidemiology, Cuba); Gabriel N. Hortobágyi, MD, FACP (Medical Oncology, USA); Julio Ibarra, MD (Pathology, Mexico/USA); Kardinah, MD (Radiology, Indonesia); Britt-Marie Ljung, MD (Pathology, Sweden/USA); Mandar Nadkarni, MBBS, MS (Surgery, India); Anthony Nsiah-Asare, MD (Surgery, Ghana); Mary Onyango, MPH, MBA (Advocate, Kenya); Hélène Sancho-Garnier, MD (Epidemiology, NGO, France); László Vass, MD, PhD, FIAC (Pathology, Hungary)

resources; and the diagnostic testing must consider the treatment options available. The Kenya project highlighted the key role health professionals can play and the value of free clinical screening programs in establishing public awareness, providing epidemiological data, and identifying health behaviors.

Roshan Farokh Chinoy, Professor and Head of Pathology at Tata Memorial Hospital in Mumbai, India, presented to the group on methods for tumor marker assessment in breast cancer, focusing on immunohistochemical laboratory analysis techniques in low-income settings, spawning discussions on difficult questions regarding quality, capacity, and the interrelationship of tests and treatment. The diagnosis panel tackled other difficult topics, including tissue sampling methodology. **Britt-Marie Ljung**, originally from Sweden and now a pathologist at the University of California in San Francisco, gave strong evidence arguing for the need of trials comparing fine needle cytology with core needle and surgical histology for breast cancer diagnosis in LMCs.

The question of technology assessment was posed by **Edward Azavedo** in his presentation on computer-aided diagnosis (CAD) to facilitate mammographic diagnosis. Dr. Azavedo, a radiologist at Karolinska University Hospital in Stockholm, served as co-chair of the Health Care Systems panel. He showed that while CAD is proving to have application in high-income settings as a "second read" on mammograms, it is not a replacement for quality mammographic interpretation.

Telemedicine, a rapidly developing application of clinical medicine in developed and developing countries, was addressed by **Gaurav Agarwal**, a professor of breast surgery from India. Agarwal spoke on telemedicine's use in breast pathology interpretation. The role of diagnostic ultrasound and mammography for diagnostic breast work ups was presented by **Justus P. Apffelstaedt**, a surgeon from South Africa based on his experience in his clinic.

Co-chair of the Diagnosis Panel, **Stephen F. Sener**, gave an important talk on quality indicators. **Baffour Awauh**, BHGI Project PI from Ghana, described the successful project that evolved out of a meeting at the 2005 BHGI global summit, thanks to the mentorship of **Helge Stalsberg**, a pathologist from the University Hospital of North Norway in Tromso. Within a four-month period, the collaboration between Ghanian and Norwegian hospitals helped to establish critical pathology services at Komfo Anokye Teaching Hospital in Kumasi.

Treatment Panel: Day Three

The Treatment Panel focused on allocation of systemic therapies resources, and addressed three topics: radiation, cytotoxic and systemic therapy.

Inspiration began the day with a presentation by breast cancer advocate **Rama Sivaram** from Pune, India. Director of Outreach and Counseling at the Prashanti Cancer Care Mission, Sivaram, described how she helped establish affordable and integrated cancer treatment and screening programs with a holistic, artful approach at Prashanti Mission, in the process building capacity. Also from India, **Rajendra Badwe**, Head of Surgical Oncology at Tata Memorial Hospital, described surgical issues in breast cancer treatment and specific quality indicators of accurate staging and adequate locoregional therapy.

Badwe presented findings from studies from his institution in which it was shown that 1) diagnostic mammography is not critical to successful breast conservation surgery when all patients are presenting with palpable disease, and 2) patients who have undergone "mastectomy" in India outside of specialty centers can have large

amounts of breast and/or axillary tissue left behind in the operative bed, often with significant residual cancer, warranting revision surgery. Radiation therapy techniques in settings of limited resources, was presented by Professor Emeritus, **Carlos Perez**, of Washington University in St. Louis, who provided a broad and authoritative discussion of radiation therapy techniques especially as can be provided in low-income settings.

The Treatment Implementation Panel was led and co-chaired by **Alexandru Eniu**, MD, and **Robert W. Carlson**, MD. Dr. Eniu is a medical oncologist at the Breast Cancer Center of the National Cancer Institute, "Ion Chiricuta," Romania. Dr. Carlson, a professor of medicine in the Division of Medical Oncology and Medical Informatics at Stanford University, USA, seated center with panel. **Treatment Panel members:** Baffour Awuah, MD (Radiation Oncology, Ghana); Zeba Aziz, MD (Oncology/Hematology, Pakistan); Rajendra Badwe, MD (Surgical Oncology, India); José Bines, MD (Medical Oncology, Brazil); Ashwini Budrukkar, MBBS, MD (Radiation Oncology, India); Nagi El Saghir, MD, FACP (Medical Oncology, Lebanon); Nagi Khouri, MD (Radiology, Lebanon/USA); Richard R. Love, MD (Oncology, USA); Riccardo Masetti, MD (Surgery, Italy); A. Nandakumar, MD, MPH (Epidemiology, India); Twalib Ngoma, MD, FFRRCS (Radiology, Tanzania); Carloz Perez, MD (Radiation Oncology, Colombia/USA); Jose Miquel Reyes, MD (Medical Oncology, Chile); Paula Trahan Rieger, RN, MSN, AOCN®, FAAN (Oncology Nursing Society, USA); Eeva Salminen, MD, PhD (International Atomic Health Agency-IAEA, Finland/Austria); Rama Sivaram, PhD (Advocate, India); Tomoo Tajima, MD, FACS (Surgery, Japan); Daniel Vorobiof, MD (Medical Oncology, South Africa); Jo Anne Zujewski, MD, MAS (Medial Oncology, National Cancer Institute, USA)

Daniel Vorobiof, medical oncologist from South Africa and founder of the South African Society of Medical Oncology, addressed the topic of systemic therapy implementation of endocrine, cytotoxic and biologic therapy. **Jose Bines**, a medical oncologist from Brazil's National Cancer Institute, discussed the challenging issue of use of effective but cost-prohibitive systemic therapies and provided a framework for decision-making and implications for cancer treatment with agents like Herceptin. **Nagi El-Saghir**, American University of Beirut Medical Center, talked about the role of neoadjuvant cytotoxic and/or endocrine therapy for locally advanced cancers in limited resource countries with special consideration for the management of locally advanced disease.

Raimund Jakesz, president of Breast Surgery International and editor-in-chief of Breast Care from the Vienna Medical University, presented on the practicality of and barriers to multidisciplinary care in settings of limited resources. The panel presentations were concluded with **Alexandru Eniu**, co-chair of the panel and BHGI-Project PI, discussing his research project proposal on what an institution in a low- and middle-income country needs to participate in cancer clinical studies as a research center. The aim of this project is to develop a practical checklist-based recommendation that has not previously existed to facilitate institutions in LMCs organization for clinical research.

Health Care Systems Panel: Day Four

The Health Care Systems Panel program laid the foundation for expanding the clinical Guidelines to define core systems issues.

The Health Care Systems-Implementation Panel was co-chaired by **Joe Harford**, PhD and **Edward Azavedo**, MD, PhD. Dr. Harford is the Director of the Office of International Affairs for the National Cancer Institute, a branch of the U.S. Department of Health and Human Services, USA. Dr. Azavedo is an associate professor in the Mammography Division of the Department of Radiology at the Karolinska University Hospital, Sweden, seated center with panel. **Health Care Systems Panel members:** Brother Charles Anthony, PhD (Advocate, Greece); Alberto Barceló, MD, MSc (Pan American Health Organization, USA); Eduardo Cazap, MD (Medical Oncology, Argentina); Tony Hsiu-His Chen, MSc, PhD (Epidemiology, Preventative Medicine, Public Health, Taiwan); Stephen W. Duffy, BSc, MSc (Cancer Screening, England); Ahmed Elzawawy, MD (Clinical Oncology, Nuclear Medicine, Egypt); Wu Fan, MD (Epidemiology, China); Harold Freeman, MD (Surgeon, USA); Doudja Hammouda, MD, PhD (Epidemiology, National Institute of Health, Algeria); Elmer Huerta, MD, MPH (Epidemiology, Peru/USA); Raimund Jakesz, MD (Surgery, Austria); Jean M. Lynn, RN, MPH, OCN (Oncology, National Cancer Institute, USA); David Lubinski, MBA, MA, BS (Health Metrics Network, USA/World Health Organization, Switzerland); Shahla Masood, MD, (Pathology, Iran/USA); Helge Stalsberg, MD (Pathologist, Norway); Vivien Davis Tsu, PhD, MPH (Epidemiology, USA)

Brother Charles S. Anthony, Director of the Monastery Center for Disease Prevention, Panagia Philanthropini in Northern Greece, and renowned advocate, began the day by talking about his program for a grass roots program for holistic breast care for immigrant and minority women. **Elmer Huerta**, Director of the Cancer Preventorium at Washington Cancer Institute in Washington, DC, and president of the American Cancer Society, followed by addressing a critical issue in every part of the world, and new area of study, patient navigation, which can help patients understand and receive care in systems that suffer for limited internal organization.

Ahmed Elzawawy reported on his 23-year analysis on accessibility of breast cancer management in Port Said, Egypt, and the changes which occurred in delay and clinical presentation. Elzawawy is president of the International Campaign for Establishment and Development of Oncology Centers & Experts in Cancer without Borders. Decision making in pharmaceutical delivery, which referenced the essential drug list from the International Network for Cancer Treatment and Research (INCTR) and World Health Organization (WHO) project formularies,

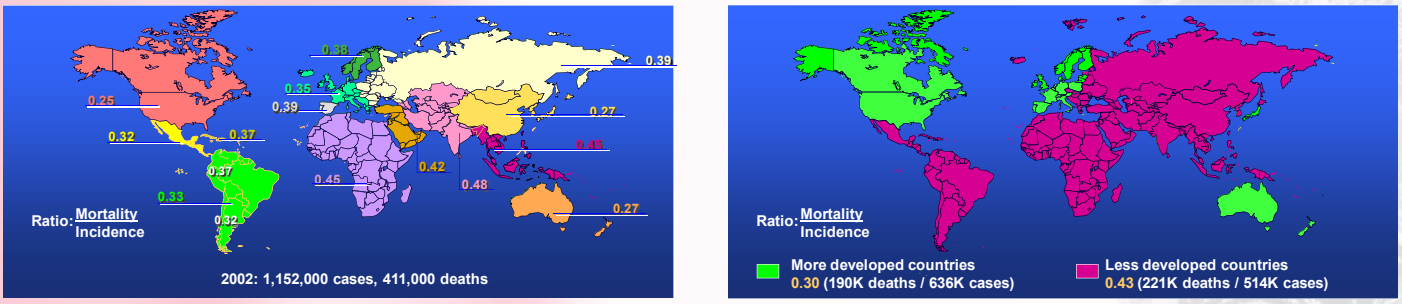

Figure 2. Estimated mortality-to-incidence ratios for breast cancer in 2002 by A) global geographic region of the world and B) more developed vs. less developed countries. The majority of breast cancer cases are diagnosed in developed countries, but the majority of breast cancer deaths occur in the developing world.

Radiation Oncology Focus Group participants: Ahmed Elzaway, Egypt; Mary Onyango, Kenya; Twalib Ngoma, Tanzania

was addressed by **Eduardo Cazap**, the founder and President of SLACOM-Latin American & Caribbean Society of Medical Oncology.

Panel co-chair, **Joe Harford**, NCI Director of the Office of International Affairs and strategic leader for knowledge transfer for the International Union against Cancer (UICC), presented a global overview of health care systems worldwide. **Tony Hsiu-His Chen**, Director of the Centre of Biostatistic Consultation at National Taiwan University and President of the International Asian Conference on Cancer Screening, presented statistical analysis and economic modeling in breast interventions programs. **David Lubinski**, from the WHO, presented information on his global program, the Health Metrics Network (HMN) and health systems informatics. Lubinski, formerly with Microsoft, leads the development of the technical framework for strengthening country health information systems. BHGI Project PI, **Kardinah**, a radiologist from Indonesia, ended the panel presentations describing her pilot research project on increasing women's breast health awareness in Jakarta, Indonesia. This novel project is training mid-wives in rural Jakarta to increase the ability of finding breast abnormality and learn how to refer it for further examination.

FOCUS GROUPS

During the summit, ancillary focus groups met to discuss **systemic therapy**, **breast pathology**, **radiation oncology**, **clinical research**, **economic modeling** and **breast surgery**. Several focus group articles will be published with the 2008 guidelines as additional references. Original articles will also be published that address **breast cancer prevention**, **surgical pathology**, **revision surgery**, **research agendas, effective but cost prohibitive drugs**, and **strategic health communication's role** in enhancing breast cancer outcomes in limited-resource countries and results of an **expert SLACOM/BCRF expert survey on breast cancer in Latin America.**

TRAVELING **SCHOLARS**

BHGI selected five traveling scholars to attend the Budapest summit to share their work in promoting more optimal breast cancer care in their home countries. Funding for the scholars to attend the summit was provided by the **Office of International Affairs**, and **Office on Women's Health, NCI**, and the **Office of Research on Women's Health, NIH**. The scholars presented posters of their abstracts, and participated in the panel discussions. These promising young physicians are embarking on careers in breast health care, cancer control and related breast health epidemiological research. The BHGI was honored to highlight the work and insight of these outstanding individuals.

SCHOLAR		POSTER TITLE
	**Shukhrat Aripov, MD** Uzbekistan	*Breast cancer early detection in Uzbekistan*
	**Neslihan Cabioglu, MD, PhD** Turkey	*Attitudes towards breast cancer screening among Turkish women*
	**William Mbabazi, MD** Uganda	*Establishing a breast health initiative for Uganda: Challenging gender inequalities in health policy and planning*
	**Chin-Yau Chen, MD** Taiwan	*The choice between breast conservation and mastectomy in Taiwanese women*
	**Anusheel Munshi, MD** India	*The Breast Lumpometer: The test of a novel device for measuring the unknown tumor size*

SUMMIT **OUTCOMES**

The scientific strength of the international BHGI work in Budapest laid the foundation for the challenging collaborative writing process that quietly ensued through the spring, led by summit panel co-chairs. To aid this work, BHGI produced transcripts of the meeting with executive summaries, which were posted on the BHGI secure web-based portal, Sharepoint. The transcripts and summaries were the basis for the consensus articles' development and were reference for focus group and individual articles. The use of the secure web-based portal was designed to enabling international panel discussion groups and shared writing. Draft manuscripts and comments were posted throughout the development process. BHGI Publications Editor, **Sandra Distelhorst**, worked closely with co-chairs and contributing authors, providing editorial direction, and facilitating publication development. The 2007 revised BHGI Guideline Tables, reflecting the outcome of the summit four-day discussion and analysis, were posted for the 2007 panelists to review and provide critique of the complex multi-level recommendations of the four panels for breast cancer care.

Sandra Distelhorst,
BHGI Publications Editor

The culmination of the months-long work of the summit panels, it is anticipated, will be published in October 2008, breast cancer awareness month. The international clinical consensus *Guidelines for International Breast Health and Cancer Control–Implementation*, with the focus group and original articles, will define key implementation strategies and polices in public health and cancer control. The BHGI Guidelines will be an essential medical reference in perpetuity for LMCS to improve breast health outcomes.

CONTINUING **OUTCOMES**

Other outcomes of the summit are less tangible but critical. Connections and activities were established by Global Summit participants, as exemplified by the pathology collaboration of **Baffour Awauh** from Ghana and **Helge Stalsberg** of Norway, who met at the 2005 Global Summit in Bethesda. Their meeting ultimately led to an international collaboration for the re-establishment of pathology services in Kumasi, Ghana. New collaborative efforts resulting from the 2007 summit are anticipated.

The BHGI global summit provided a unique opportunity to a culturally diverse group of breast cancer experts to contribute knowledge, to learn from each other, and to ultimately produce breast health care guidelines that define the minimum needs for providing breast cancer care in any health care setting, and establish goals for improvement in available quality of care in low- and middle-income countries based on real, existing resources. The Guidelines also provide quality goals for health care systems to ensure that they are appropriately responsive to the needs of breast cancer patients, and in the process, to patients with other cancers.

> The continued global dissemination of the guidelines and BHGI publications will facilitate and foster public and health care provider education programs, and inform health care policy decisions.

STEERING COMMITTEE MEETING

The BHGI Steering Committee met during the summit to discuss future direction, programs and projects that BHGI should pursue.

Chaired by **Gabriel Hortobágyi**, the committee is comprised of representatives of the BHGI alliance, including governmental and non-governmental organizations, for-profit and non-profit organizations, advocacy organizations, foundations, medical and health associations and key opinion leaders, expert doctors, nurses, scientists and policy makers. Dr. Hortobágyi reminded the committee that the greatest need in cancer is in the developing world and that "BHGI came together to address this need based on real resources available. BHGI is developing small pilot projects to test some aspect of the Guidelines in a specific region, with hope for future projects."

Joe Harford, Director of the NCI Office of International Affairs, made the distinction that the "*implementation focus*" should be on how to learn to implement and effectively communicate to reach key audiences, such as Ministries of Health. **Randi Goeckler**, Director of Patient Advocacy, Oncology-Worldwide Medicines Group for Bristol Myers Squibb, proposed to the committee the concept of a BHGI virtual institute centering on implementation and sharing the specialized knowledge of the BHGI network. **Paula Rieger**, CEO of the Oncology Nursing Society, pointed out that oncology nursing was one of the most underutilized skills and that there is a dire need for advocate training.

BHGI Steering Committee: Gabriel N. Hortobágyi, Chairman, BHGI Executive Committee, University of Texas MD Anderson Cancer Center, USA; Benjamin O. Anderson, Breast Health Global Initiative, University of Washington, Fred Hutchinson Cancer Research Center, USA; Joe Harford, NCI, USA; Diana Rowden, Komen for the Cure, USA; Alberto Barceló, PAHO, USA; Eduardo Cazap, ASCO, SLACOM, Argentina; Randi Goeckeler, Bristol Myers Squibb, USA; Krystyna Gurstelle, Pfizer Inc, USA; Wendy S. Harris, GE Healthcare, USA; Julio Ibarra, Jr., American Society of Breast Disease, USA; Raimund Jakesz, Breast Surgery International, Austria; Claire Neal, Lance Armstrong Foundation, USA; Sandra Rasche, Ethicon Endo-Surgery, Inc, Germany; Paula Rieger, Oncology Nursing Society, USA; Eeva Salminen, International Atomic Energy Agency of the UN, Austria; Stephen F. Sener, Evanston Northwestern Healthcare, American Cancer Society, USA; Roudabeh Valian, F. Hoffmann-La Roche AG, Basel. **Members at Large:** Edward Azavedo, Karolinska University Hospital, Sweden; Robert W. Carlson, Stanford University, USA; Alexandru Eniu, Cancer Institute "I. Chiricuta, Romania; Shala Masood, The Breast Journal, USA; Roman Shyyan, Lviv Regional Cancer Center, Ukraine; Robert A. Smith, American Cancer Society, USA; Cheng-Har Yip, University Malaya Medical Centre, Malaysia. **Absent:** Alberto Costa, European School of Oncology, Italy; Joseph D. Purvis, AstraZeneca, USA; Eddie Reed, Centers for Disease Control and Prevention, USA; Cecilia Sepulveda, World Health Organization, Switzerland.

Benjamin Anderson, Eduardo Cazap

Amongst the committee, there was a general consensus that the next five-year phase of BHGI program development and Guideline implementation should define an integrated, comprehensive plan based upon the principles for economic stratification as defined in the 2006 publication. BHGI will continue to seek organizational collaborations to help support pilot research projects, and to test and implement the guidelines for the creation of modular programs. Communication strategies for greater **open access** for dissemination of all BHGI health information, as well as additional **translations** of the Guidelines are planned. Training and education curriculums will be prioritized through organizational collaboration with BHGI partners and others. Further expansion of the BHGI Sharepoint portal will be the hub of much of this international work as BHGI develops its informatics foundation for more integrated public health information systems for low resource settings.

Gala dinner

Global Summit, Museum of Ethnography, Budapest

CLOSING **CEREMONY**

The summit culminated at an elegant gala dinner hosted by the BHGI alliance at the Hungarian Museum of Ethnography. **Eduardo Cazap**, Immediate-Past Chair of the ASCO International Affairs Committee from Buenos Aires, Argentina, and BHGI Steering Committee member, thanked the international group for key collaboration. "The BHGI Global Summit is the first step in the process of writing this necessary guide for practical implementation steps in improving standards of care worldwide. The continued contributions of this dynamic international alliance are essential to getting this important body of work accomplished and freely available to the world."

Cazap further recognized BHGI founder and chair, **Benjamin Anderson**, saying "Dr. Anderson is to be congratulated for his vision and leadership to address the growing breast cancer problem in the developing world. We are indebted to his dedication to this cause and indebted to all of you who are contributing so greatly."

ACKNOWLEDGEMENTS

Special thanks to BHGI Senior Program Manager, **Leslie Sullivan**, for outstanding management of the BHGI alliance, program development and global summit. We would like to acknowledge global summit meeting coordinators, **Carole Fisher** and **Eric Tobiason**, of the University of Washington, Office of Continuing Medical Education, for their excellence in meeting coordination and execution. We also wish to acknowledge global summit volunteers, **Susan Cranston** and Susan G. Komen for the Cure advocate **Kim Powell**, both from Montana, for their tireless contributions at the meeting. We wish to extend special thanks and recognition to Publications Editor **Sandra Distelhorst** for her work and commitment in the months following the global summit to the development of the Guidelines publication.

SUSAN G. KOMEN FOR THE CURE "IGNITE THE PROMISE"
Global Breast Cancer Advocate Summit

Preceding the BHGI meeting in Budapest, Susan G. Komen for the Cure, the world's largest grassroots network of breast cancer survivors and activists, held its *Ignite the Promise Global Breast Cancer Advocate Summit,* Sept. 30, 2007 in Budapest, Hungary, in association with the BHGI Global Summit on International Breast Health-Implementation. The first-of-its-kind event united more than 50 advocates from five continents. Mrs. Laura Bush and Dr. Klara Dobrev, wife of the Hungarian Prime Minister, served as Honorary Co-Chairs of the event.

The goal of the Summit was to better understand the global impact of breast cancer by teaming delegates from diverse professions, cultures and experiences to share strategies on how to increase breast cancer awareness, early detection and treatment options in their countries, ultimately reducing the stigma a breast cancer diagnosis can bring. Delegates were tasked with developing advocacy guidelines to effect meaningful changes throughout the world.

For more information about Susan G. Komen for the Cure visit *www.komen.org.*

REALIZING THE MISSION

SUMMARY OF **BHGI SUMMIT SERIES: 2002-2007**

The summit in Budapest hosted by ASCO marked the 5-year anniversary of the first BHGI meeting held in Seattle in 2002, which addressed health care disparities, producing the original *Guidelines for International Breast Health and Cancer Control* (Guidelines) for low- and middle-income countries (LMCs). The second summit held in 2005 was hosted by the National Cancer Institute's Office of International Affairs to further develop the guidelines, introducing an economic stratification to the guidelines based on four levels of resources: basic, limited, enhanced and maximal.

The BHGI resource stratification approach to guideline development is considered a model approach for developing resource-sensitive guidelines according to the Institute of Medicine 2007 report, *Cancer Control Opportunities in Low- and Middle-Income Countries*. The BHGI alliance, a strategic mix of internationally-focused health care organizations co-founded and co-sponsored by the Fred Hutchinson Cancer Research Center and Susan G. Komen for the Cure, has enabled this series of summits for guidelines development, creating the foundation for the next program phase in Guideline implementation and development of international Learning Laboratories.

The conclusion of the six-year series of biennial BHGI global summits for guidelines development, summarized below, now leads into the next five-year phase of program development: Guideline implementation.

- **GLOBAL SUMMIT 2002: Health Care Disparities** ("International Breast Health Care: Guidelines for Countries with Limited Healthcare Resources," Breast Journal, May/June 2003: Vol. 9, Suppl 2).
  - Consensus Statements: Early Detection Panel; Diagnosis Panel; Treatment Panel.
- **GLOBAL SUMMIT 2005: Resource Stratification** ("Guidelines for International Breast Health and Cancer Control," Breast J 2006;12 Suppl 1:S117-120).
  - *Basic level* — Core resources or fundamental services necessary for any breast health care system to function.
  - *Limited level* — Second-tier resources or services that produce major improvements in outcome such as survival.
  - *Enhanced level* — Third-tier resources or services that are optional but important, because they increase the number and quality of therapeutic options and patient choice.
  - *Maximal level* — Highest-level resources or services used in some high resource countries that have lower priority on the basis of extreme cost and/or impracticality.
- **GLOBAL SUMMIT 2007:** "Guidelines for International Breast Health and Cancer Control—Implementation," **Guideline Implementation** (to be published October 2008).
  - Consensus Statements: Early Detection Panel; Diagnosis Panel; Treatment Panel, Health Care Systems, focus group articles and individual articles relevant to breast health implementation in LMCs.

FUTURE: **BHGI FIVE-YEAR IMPLEMENTATION PLAN**

To achieve Guideline implementation, BHGI has outlined a five-year plan with three key focus areas:

1. **Dissemination & implementation (D&I) research**
2. **Education and training programs**
3. **Technology application and development**

The foundation of the plan will be the creation of international **learning laboratories**, creating parallel laboratories in different parts of the world to develop and test modules that will form the basis for program expansion within LMCs.

1. Dissemination & Implementation (D&I) Research

D&I research plays a crucial role in applying the experience and knowledge of high income societies to the challenges of women and breast cancer throughout the world. The dominant paradigm even now in the medical community is that good research and publication should be sufficient to ensure the translation of scientific findings into general practice. Unfortunately, the landmark Institute of Medicine (IOM) report from 2001 clearly identified the failure of much scientific innovation to be translated into practice.

D&I is a new, growing area of research to study how knowledge can be transferred to successfully achieve improved health outcomes, such as reduced morbidity from breast cancer. The 2007 BHGI Summit included discussions on knowledge transfer that will be continued over the next five-years. Through the D&I program component, BHGI will be able to accelerate the successful adaptation and implementation of the Breast Health Global Initiative Guidelines for breast cancer care in LMCs by identifying the attributes most relevant to organizational and behavioral change in health systems.

To do this the first necessary component was Guideline Development, which is now complete. The next component, **Implementation-Readiness Assessment**, is in process. Readiness assessment will build on the success of BHGI Guideline resource stratification and continue to use evidence based research and expert consensus opinion. The BHGI will use evidence-based research and expert consensus to identify qualitative and quantitative tools that can be used to determine the readiness of a health care system to implement BHGI guidelines at the next level of care.

The 5-year program will develop and pilot-test implementation-readiness assessment approaches to create a readiness assessment package for free distribution globally. No such comprehensive package is available at this time; the few individual tools that are available address only parts of the process and have not been tested or adapted for LMCs. Assessment packages can be used to inform the design of optimal national guideline implementation strategies. These implementation-readiness assessment packages will include evaluation components for utility, validity, and feasibility. Combining implementation-readiness assessment with the BHGI Guidelines and quality indicators will facilitate the implementation of breast cancer care guidelines and identify successful and sustainable programs to improve the care of breast cancer patients.

Photo provided by PATH

2. Education and Training

The second component of the BHGI five-year plan is Education and Training. Specially developed curricula for education and training in LMCs can be applied and studied in LMC-based learning laboratories for information transfer of evidence-based principles of early detection, diagnosis and treatment as outlined in the BHGI guidelines.

BHGI, with its foundation in science and clinical expert consensus, is in a unique position to contribute to the global education and training efforts. BHGI is committed to work with the Susan G. Komen for the Cure and other organizations involved in advocacy and education to improve breast health around the world. BHGI professional education and training program will be developed with partnering organizations and key stakeholders throughout the world to create professional education and training curricula to ensure successful, coordinated and sustainable programs.

3. Technology Assessment, Application & Development

The third important component of the BHGI five-year plan is technology assessment, application and development. Adaptation of existing or novel technology is needed in LMCs, especially for breast imaging, pathology, radiation therapy and systemic treatment. During the past six-years, BHGI experts have considered ways to determine the impact of new technologies and treatments on key aspects of breast cancer care. The next five-years will build on that ground work, and focus on developing and implementing formal strategies for technical assessment of existing technology, comparing new or novel tools to available technologies to determine what operational strategies optimize outcome in a given setting of resource constraint. Such strategies are needed by health care providers and health ministers to make informed decisions about health care resource allocations in an ever changing landscape of health care technology options.

The five-year plan will build on previous BHGI guidelines and checklists developed in the past six-years.

Pilot programs will be considered to test technology applications in imaging and pathology, and to develop measures of effectiveness. BHGI past research and discussions have laid the groundwork for these important next steps in technology assessment, application and development in LMC and regions. During the five–year plan, BHGI will use science, expert consensus and develop multiple partnerships to help define the necessary tools, processes and timeframes for development. In the process, BHGI will define what a successful, sustainable learning laboratory looks like, identify laboratory locations and partners in diverse regions of the world, develop curriculums, and pilot test methodologies to create sustainable learning modules.

In conjunction with the BHGI alliance and key stakeholders, a global meeting will be planned to present the progress of the BHGI Implementation Plan.

Development of Learning Laboratories

The implementation of D&I research, education and training and technology application could be vetted through the development of international Learning Laboratories to create unique environments for information transfer, collaborative learning, study and analysis. Through collaboration between BHGI and in-country sponsoring organizations, specialized curricula and methodology could be developed based on the BHGI guidelines. BHGI Learning Laboratories established in collaboration with sponsoring institutions in LMCs could become a venue for education and training. A key principle in success of these learning centers would be the recognition that experts coming from high-income, middle-income and low-income countries all have information, experience and skills to share. While experts from high-income countries may have expertise in the application of cutting-edge diagnostic tools or therapies, experts from LMCs have expertise in the reality of health care delivery in limited resource settings. Real world problem solving will require a collaborative approach using mutual knowledge transfer from all participants.

By applying D&I research methodology, the outcome of training opportunities and educational exchanges in Learning Laboratories could be assessed and measured. Participants from LMCs coming for breast health education could be tracked after their training to learn what aspects of the Learning Laboratory curriculum proved useful and what aspects warrant more improvement and study. By obtaining organized feedback from Learning Laboratory participants, the effectiveness of the BHGI Guidelines could be tested and improved. As such, the BHGI Learning Laboratory could become the operational model for BHGI guidelines application and testing in a practical, real world LMC environment, as a key step toward improving breast health care delivery in LMCs around the globe.

BHGI ORGANIZATIONAL NETWORK and COLLABORATORS

Through the successful development of two iterations (soon to be three) of clinical evidence-based guidelines for LMCs, the first phase of the BHGI mission has been achieved through a dynamic global alliance. These essential medical tools, the guidelines for organizing and improving breast health care based upon real resources are now freely available via the internet. As the next steps evolve in realizing the mission to implement and study the evidence-based Guidelines, new activities will be established with the BHGI alliance of key stakeholders and global summit participants. New connections will be made with collaborators from around the world to facilitate development of projects, data collection and organization, and networking among international partners. Ongoing communications will continue through the BHGI alliance and global health community, committees, publications, projects and via our website, *www.fhcrc.org/science/phs/bhgi/*.

This year, in tandem with Susan G. Komen for the Cure, BHGI will announce plans for the next **global summit** which will focus on the progress of the BHGI Implementation Plan and international pilot projects.

BHGI will continue to engage collaboration. In the coming phase of implementation we will continue as a program open to **learning**, **growth** and **evolution**.

OTHER **BHGI ALLIANCE NEWS**

BHGI Panel at UICC World Cancer Congress

Cancer is a global issue; it respects no borders and affects us all, directly or indirectly. The International Agency for Research on Cancer (IARC) forecasts that by 2020 three out of every five new cancer cases will occur in resource-constrained countries. As economic development surges forward and people's average life span increases, resource-constrained countries in particular are facing a dramatic rise in cancer incidence. The next biennial **World Cancer Congress** (WCC) of the **International Union Against Cancer** (UICC) will be held in Geneva, August 27-31, 2008 to focus on public health, prevention, cancer and tobacco control, palliative care and patient advocacy as they apply to high and resource-constrained countries alike. The UICC World Cancer Congress will bring together the world's leaders in the fight to control cancer.

At the congress, the Breast Health Global Initiative will hold a panel on breast health care in low- and middle-income countries (LMCs), chaired by Dr. Anderson, BHGI Chair and Director. The panel session will present on the *Guidelines for International Breast Health and Cancer Control-Implementation* that will be published in October.

The panel will address the four primary sections of the to-be-published clinical guidelines for LMCs: early detection of breast cancer; diagnosis of breast cancer; treatment of breast cancer; and health care systems, by BHGI Global Summit Co-chairs and first authors of the guidelines, **Cheng Har Yip**, MD/Malaysia, **Roman Shyyan**, MD/Ukraine, **Alexandru Eniu**, MD/Romania, and **Joe Harford**, PhD/USA.

The BHGI panel presentation at the World Cancer Congress is supported through a grant from **Pfizer Inc**, sustaining BHGI corporate partner represented by **Krystyna Gurstelle**.

The BHGI panel, scheduled on Thursday, August 28, will be held at 10:30 a.m. until noon.

Joe Harford Recognized for Work in Middle East

Dr. Joe Harford, NCI director of the Office of International Affairs and Chair of the Strategic Advisory Group (SAG) of the Ireland-Northern Ireland-NCI Cancer Consortium, was recognized for his work as NCI liaison to the Middle East Cancer Consortium (MECC) (*www.mecc.cancer.gov*) by the Arab Medical Association against Cancer (AMAAC). The focus of Dr. Harford's Middle East work is similar to the focus of his work in support of the Consortium, to include establishing and strengthening cancer registries plus individual and group training activities for health care workers and cancer researchers. The award recognized his significant contribution to enhance the status of cancer care and cancer research in the region and unwavering efforts to support needed infrastructure and create opportunities in cancer education, training and capacity building to help cancer patients and their families throughout the Arab World.

Our congratulations to friend Dr. Harford, BHGI Executive Committee member and alliance partner from the beginning.

THE **BHGI ALLIANCE**

We work as a global health alliance to advance the international fight against breast cancer and disseminate a message about breast health and breast cancer in a crowded public consciousness of the global health world. **We are grateful to our partners and collaborators throughout the world who share this vision. Thank you for your important contributions to this endeavor for medically underserved women.**

The Breast Health Global Initiative

www.fhcrc.org/science/phs/bhgi

The **Breast Health** Global Initiative

BENEFACTOR ORGANIZATIONS

Founding Organizations

Susan G. Komen for the Cure

Fred Hutchinson Cancer Research Center — A Life of Science

Global Summit Host Organization

ASCO — American Society of Clinical Oncology

Sustaining Scientific Organization Partner

National Cancer Institute — Office of International Affairs (OIA)

Sustaining Corporate Partner

Pfizer Oncology

Scientific Organization Partners

American Cancer Society International

LIVESTRONG — Lance Armstrong Foundation

Corporate Partners

AstraZeneca · Bristol-Myers Squibb Company · Ethicon Endo-Surgery, Inc. (a Johnson & Johnson company) · Novartis · GE Healthcare · Roche

Collaborating Organizations

Pan American Health Organization · Office on Women's Health, NCI · Office of Research on Women's Health, NIH · Oncology Nursing Society · American Society for Breast Disease · Centers for Disease Control and Prevention

PARTICIPATING ORGANIZATIONS

World Health Organization · Breast Surgery International · International Union Against Cancer · International Network for Cancer Treatment and Research · International Atomic Energy Agency of the United Nations · International Society of Nurses in Cancer Care · International Society of Breast Pathology · Middle East Cancer Consortium · World Society for Breast Health