International Cancer Screening Network 2015

June 2 – 4, 2015 • Rotterdam, The Netherlands

Biosketches

Co-chairs

Harry de Koning, Ph.D.

Dr. de Koning is a Professor of Public Health and Screening Evaluation at Erasmus University in Rotterdam, The Netherlands. Dr. de Koning's major scientific contributions are in the areas of (1) designing, running, and evaluating large-scale, multidisciplinary, population-based, randomized controlled screening trials to establish the efficacy of screening; (2) evaluating active international screening programs and tests to establish effectiveness; and (3) guiding public health policies using predictions of favorable and unfavorable effects and the cost of screening, based on micro-simulation modelling of the natural history of disease, as well as cost-effectiveness and cost-utility analyses.

Dr. de Koning's Ph.D. on the cost-effectiveness of breast cancer screening (1993) was one of the first Health Technology Assessments in The Netherlands, and one of the first on breast cancer screening in the world. He designed and acquired new projects on MRI screening in high-risk women, and leads the international team responsible for pooling and modelling the Magnetic Resonance Imaging results from The Netherlands, the United Kingdom, and Canada. He had a shared responsibility for designing the European Randomized Study of Screening for Prostate Cancer trial on prostate cancer (PC) screening, which included establishing the screening interval, core age groups, and monitoring plan (secretary, Data Monitoring Committee), and set up and chaired the international committee charged with reviewing the primary outcome for prostate cancer mortality among the eight participating European centers.

He is the Principal Investigator (PI) of the Dutch-Belgian Randomized Lung Cancer Screening Trial and designed the entire trial in all of its facets (sole trial with different screening intervals). In addition, he is the PI of the Risk Or Benefit IN Screening for CArdiovascular (ROBINSCA) disease trial through a European Research Council advanced researcher grant to assess the (cost) effectiveness of screening for cardiovascular disease. In 2004, he was appointed a member of the Dutch Health Council committee on diabetes screening. He also has led evaluations of various screening programs, including scoliosis, amblyopia, child disorders, and child abuse, and is involved in developing guidelines evaluating screening for late effects in children treated for cancer.

Carrie Klabunde, Ph.D., M.H.S., M.B.A.

Dr. Klabunde is the Senior Advisor for Disease Prevention in the Office of Disease Prevention (ODP), Office of the Director, National Institutes of Health (NIH), Bethesda, Maryland. Dr. Klabunde joined ODP in January 2015 after 18 years as an epidemiologist and program director with the National Cancer Institute. Dr. Klabunde's current responsibilities include leading the ODP effort to identify prevention research areas for investment and expanded effort by the NIH. She serves as the NIH liaison to the U.S. Preventive Services Task Force and Community Preventive Services Task Force. She also is a scientific advisor to the Pathways to Prevention program.

Dr. Klabunde's background is in health services and cancer control research. She has conducted research to evaluate the organization and delivery of cancer care, with an emphasis on cancer screening delivery in primary care practice. She has expertise in designing and implementing probability sample surveys that assess health care provider knowledge, attitudes, recommendations, and practices regarding various aspects of cancer control. From 2008 to 2014, she served as the scientific lead for the cancer control supplement to the National Health Interview Survey. She also developed and for many years managed an extramural research program to improve the utilization, delivery, and outcomes of colorectal cancer screening in the United States. From 1997 to 2012, Dr. Klabunde was the lead project scientist for the International Cancer Screening Network (ICSN) and in 2012, she became chairperson of the ICSN, assuming this responsibility from Dr. Rachel Ballard-Barbash.

Dr. Klabunde received her Ph.D. in Health Policy and Management from the Gillings School of Global Public Health, University of North Carolina at Chapel Hill, and M.H.S. and M.B.A. degrees in Health Services Administration from the University of Florida.

Keynotes

Jan Hoeijmakers, Ph.D.

Dr. Hoeijmakers joined the Department of Genetics of the Erasmus University in Rotterdam in 1981 to work on DNA repair. His team succeeded in cloning the first of many subsequent human DNA-repair genes, allowing elucidation of the reaction mechanism of nucleotide excision repair; discovered the strong evolutionary conservation of DNA repair; resolved the basis of a variety of enigmatic human repair syndromes; and identified a new class of "basal transcription disorders." His laboratory generated a comprehensive series of mouse DNA repair mutants, strikingly mimicking the corresponding human syndromes, which provided detailed insight into the complex etiology of human repair diseases. He discovered a very strong, initially highly controversial connection between DNA damage and (*bona fide*) aging, and on this basis proposed a trade-off between cancer and aging. By modulating DNA repair, damage induction, and nutrition, his team succeeded in largely controlling the process of aging in mice. The type of DNA repair defect is found to determine the type of segmental accelerated aging and/or cancer. The severity of DNA repair deficiency correlates with the rate of accelerated aging: shortening lifespan and time of onset of many aging-related diseases from years to weeks. Conditional repair mutants allow targeting accelerated aging to any organ, tissue, or stage of

development. Expression profiling revealed an unexpected similarity between short- and long-lived mice: both suppress the somatotrophic axis, which extends lifespan. This work led to the identification of a highly intriguing "survival response" that promotes healthy aging and counteracts cancer by redirecting energy from growth to maintenance. Importantly, by nutritional interventions in collaboration with the RIVM (Bilthoven), his team very recently succeeded in extending the lifespan of some repair mutants over two-fold, which for mammals is unprecedented. Moreover, the mouse mutants turned out to be far superior models for neurodegenerative disorders, like Alzheimer's and Parkinson diseases, than any currently available model. Nutritional interventions strongly delayed the development of this dementia. Additionally, his laboratory developed a new line of *in vivo* research revealing the highly dynamic organization of DNA repair in living cells and intact organisms. His group also generated the first mouse mutants with intrinsic defects in the biological clock. In summary, his work places DNA damage at the basis of cancer and aging, highlights the flexible nature of aging, and establishes the repair mutants as suitable tools for identification of life-span-extending pharmaceutical and nutraceutical interventions in mammals. This opens new perspectives for prevention or treatment of aging-related diseases, which are associated with enormous loss of quality of life and constitute the main medical and health care challenges in all developed countries.

Ian Jacobs, M.D., M.A., M.B.B.S., FRCOG

Professor Jacobs has been President and Vice-Chancellor of the University of New South Wales Australia, a group of eight universities in Sydney, since February 2015. Prior to this, he was Vice President of the University of Manchester, Dean of the Faculty of Medical/Human Sciences, and Director of the Manchester Academic Health Science Centre (MAHSC) from 2011 to 2015. He was Dean of the Faculty of Biomedical Sciences at University College London (UCL) from 2009 to 2011, Director of the Comprehensive Biomedical Research Centre at University College London Hospitals (UCLH)/UCL (2006 to 2010), Research Director UCL Partners Academic Health Science System (2009 to 2011), and Director of the UCL Institute for Women's Health from 2004 to 2009.

Alongside his leadership roles, he directs a laboratory and clinical research team focused on genetics, proteomics, imaging, and biomarkers in detection and screening for gynaecological cancers and has held awards >£30m from the Medical Research Council (MRC), Cancer Research UK (CRUK), and the Department of Health (DH). He is Principal Investigator on several large multicentre clinical trials, including the United Kingdom (UK) Collaborative Trial of Ovarian Cancer Screening (UKCTOCS), involving 202,000 participants in 13 collaborating UK centres, and the UK Familial Ovarian Cancer Screening Study (UKFOCSS).

He qualified at Cambridge University and the Middlesex Hospital, obtained accreditation in obstetrics and gynaecology working at the Royal London and Rosie Maternity Cambridge, as well as specialist accreditation as a surgical gynaecological oncologist at Bart's and The Royal Marsden. He completed a Doctor of Medicine Thesis at Queen Mary University of London, the CRUK McElwain Fellowship at Cambridge University, and an MRC Travelling Fellowship at Duke University, North Carolina. He was head of the Department of Gynaecological Oncology and then Obstetrics and Gynaecology at QMUL from 1996 to 2004 and set up and directed the UCL Institute for Women's Health between 2004 and 2009.

In 2005, he established the Uganda Women's Health Initiative, which conducts a series of projects in Uganda, including a cervical screening programme. He has been President of the British Gynaecological Cancer Society (2001 to 2004) and of the European Society of Gynaecological Oncology (2005 to 2007). He is Medical Advisor to the Eve Appeal (Gynaecology Cancer Research fund), which he founded in 1985; a Patron of Safehands for Women; non-Executive Director of Abcodia Ltd.; and holds a National Institutes for Health Research Senior Investigator Award. He is married with three children, and his leisure time is focused on his family, running, travel, charitable work, sport, and his lifelong support of the Arsenal football club.

Leads, Moderators, and Discussants

Mireille Broeders, Ph.D., M.Sc.

Dr. Broeders has a background in Health Sciences (MS.c., 1998) and completed a Ph.D. in Epidemiology in 2004. She is an Associate Professor at the Radboud University Medical Center, Nijmegen, The Netherlands. Her research focuses on establishing the impact of cancer screening programmes, in particular screening for breast cancer. Dr. Broeders has a special interest in observational research designs that can be used in this field of research. She further works as a scientific supervisor at the Dutch Reference Centre for Screening, where she studies the implementation and evaluation of technological developments in the breast screening programme.

Jean-Luc Bulliard, Ph.D.

Dr. Bulliard is a senior epidemiologist (Ph.D.) with a tertiary education in mathematics and statistics. He has been actively involved in cancer epidemiology and prevention for over 25 years, mostly in Switzerland and New Zealand. He is responsible for the scientific supervision of two population-based cancer registries (Vaud and Neuchâtel, Switzerland). His expertise lies mostly in skin, breast, and colorectal cancer, as well as in methodology of evaluation. A member of European and Swiss Taskforce and Steering Committees (melanoma prevention, breast and colorectal screening programmes), he has conducted, for the last 15 years, the epidemiological evaluation of most Swiss mammography screening programmes and contributed to the development of quality-controlled breast service screening and the implementation of colorectal cancer screening in Switzerland. Dr. Bulliard is a Senior Research Fellow and teaches at the Biology and Medical Schools of the Lausanne and Geneva Universities.

Jessica Chubak, Ph.D.

Dr. Chubak is an Associate Investigator at Group Health Research Institute in Seattle, Washington, and Affiliate Associate Professor in the Department of Epidemiology at the University of Washington. Her research focuses primarily on cancer screening and cancer survivorship, with an emphasis on modifiable exposures and receipt of health services. She has leadership roles within the Cancer Research Network (CRN) and the Population-based Research Optimizing Screening Through Personalized Regimens (PROSPR) consortium. Before completing her Ph.D. in Epidemiology in

2007 from the University of Washington, she was a Fulbright Scholar at the University of Otago in New Zealand, where she received a Masters of Bioethics and Health Law.

Douglas A. Corley, M.D., Ph.D., M.P.H.

Dr. Corley has been a research scientist at the Kaiser Permanente Northern California Division of Research since 2002. He is also a board-certified gastroenterologist who practices at the Kaiser Permanente, San Francisco Medical Center. Dr. Corley's research interests include outcomes and epidemiologic research in gastroenterology, with a particular emphasis on gastrointestinal cancer epidemiology, cancer surveillance, pharmacoepidemiology, and nutritional epidemiology. Current active research projects include evaluations of Barrett's esophagus, esophageal adenocarcinoma, gastroesophageal reflux disease, serologic markers for gastrointestinal neoplasia, the long-term effects of gastrointestinal medications (such as anti-acid medications), the intersection between nutrition and gastrointestinal disorders, and the carcinogenic effects of obesity. Dr. Corley is lead investigator for the colon cancer component of the National Cancer Institute's Population-based Research Optimizing Screening through Personalized Regimens (PROSPR) consortium, a multisite effort to evaluate and improve cancer-screening processes. After completing medical school at the University of Pennsylvania, Dr. Corley completed an internal medicine residency at the Brigham & Women's Hospital of the Harvard Medical School in Boston, Massachusetts, and a gastroenterology fellowship at the University of California, San Francisco (UCSF). Dr. Corley subsequently obtained a Master's Degree in Public Health and a doctorate in Epidemiology at the University of California, Berkeley, School of Public Health. Prior to joining the Division of Research, he was on the full-time gastroenterology faculty at UCSF, where he was the chief of the UCSF GI Faculty Practice.

V. Paul Doria-Rose, Ph.D., D.V.M

Dr. Doria-Rose received his Ph.D. in Epidemiology from the University of Washington in 2001, and his doctorate in Veterinary Medicine from Cornell University in 1996. He currently is a Program Director in the Health Systems and Interventions Research Branch at the National Cancer Institute (NCI). In this role, he coordinates large research initiatives focused on cancer care delivery in community settings, including the screening-focused Population-based Research Optimizing Screening through Personalized Regimens (PROSPR). Prior to this, he was a Cancer Prevention Fellow in the Biometry Research Group of NCI's Division of Cancer Prevention, working on randomized controlled trials of cancer screening. He has also been a staff scientist at the Fred Hutchinson Cancer Research Center in Seattle, Washington. His research interests include the evaluation of cancer screening efficacy and interval, with a focus on colorectal and lung cancers. He has a particular interest in case-control methodology for the evaluation of screening.

Ruth Etzioni, Ph.D., M.S.

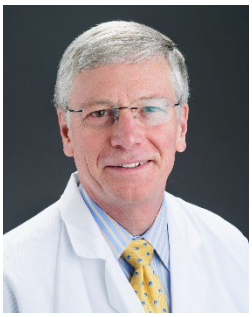
Dr. Etzioni is a biostatistician and cancer modeler at the Fred Hutchinson Cancer Research Center. She received her B.S. in Operations Research from the University of Cape Town and her M.S. and Ph.D. in Statistics from Carnegie-Mellon University. Dr. Etzioni's work focuses on modeling cancer natural history, progression, and outcomes using data on population screening patterns and trends in cancer incidence and mortality . She is a member of several national cancer screening guidelines groups in the U.S. Dr. Etzioni was the first to estimate the frequency of overdiagnosis associated with PSA screening in the U.S. population. Since then, she has published many studies and commentaries on the topic of overdiagnosis in prostate, and more recently, breast cancer screening.

Sarah Kobrin, Ph.D., M.P.H.

Dr. Kobrin has been working in the field of cancer control for more than 20 years. She is currently the Branch Chief (Acting) of the Health Systems and Interventions Research Branch. Her areas of interest include uptake of the HPV vaccine, shared medical decision making, use of theory in intervention research, and measurement, particularly in regard to shared decision making and cancer screening. Her research includes development of a scale, based on attitudes rather than beliefs, to assess perceptions of breast cancer risk. Prior to moving to the National Cancer Institute in December 2003, Dr. Kobrin was a Walther Postdoctoral Fellow at the Duke University Cancer Prevention and Control Program. She trained at the University of North Carolina at Chapel Hill School of Public Health.

Iris Lansdorp-Vogelaar, Ph.D., M.Sc.

Dr. Lansdorp-Vogelaar is an Assistant Professor at the Department of Public Health of Erasmus MC and the Senior Modeler of the Colorectal and Esophageal Cancer Research Section of the department. She has been responsible for the management and development of the MISCAN-Colon model since 2003, and the UW-MISCAN esophagus model since its initiation in 2010. Her modeling work informed the 2008 U.S. Preventive Services Task Force recommendations, U.S. Medicare reimbursement decisions on CTC and Stool DNA screening, and the Dutch National Colorectal Cancer Screening Program. Her work has been published in several authorative medical journals. She is a member of the European Cancer Network and lead author of a chapter in the European Guidelines for Quality Assurance in Colorectal Cancer Screening. In 2012, she received a career development award from the Department of Public Health to determine efficient and effective methods for model validation and calibration. Her current research further focuses on explaining colorectal cancer disparities, on individualizing colorectal cancer screening and surveillance recommendations, and on surveillance of trends in esophageal adenocarcinoma.



Michael LeFevre, M.D., M.S.P.H.

Dr. LeFevre is the Future of Family Medicine Professor and Vice Chair of Family and Community Medicine at the University of Missouri-Columbia. As Medical Director for the Department of Family Medicine, he has administrative oversight of family medicine, urgent care, and quick care practices in eight locations with over 150,000 annual visits. He teaches residents and medical students in the inpatient and outpatient settings and maintains an active practice across the full breadth of Family Medicine including inpatient work and, through 2012, obstetrics. He served as Chief Medical Information Officer for MU Health Care and directed the implementation of the electronic medical record across the system from 2002 through 2012. Much of his academic effort has been in the area of evidence-based medicine and clinical policies, and he currently serves as the immediate past chair of the U.S. Preventive Services Task Force after having completed a decade of work on the Task Force in April of 2015, serving as co-vice chair for 3 years and chair for a year. He was also a member of the Joint National Conference on Prevention, Detection and Treatment of Hypertension (JNC 8). He was elected to the Institute of Medicine in 2011. He has received numerous awards, including the University of Missouri School of Medicine Medical Alumni Association 2013 Citation of Merit and the University of Missouri 2013 Faculty-Alumni Award. Dr. LeFevre has B.S.E.E., M.D., and M.S.P.H. degrees from the University of Missouri and has been on faculty there since 1984.

Matthijs Oudkerk, M.D., Ph.D., Prof.

Dr. Oudkerk received his medical training at the University of Leiden, The Netherlands. As a staff member, he worked from 1980 to 1985 in the Department of Radiodiagnostics at the University Hospital Leiden. In 1982, he received his Ph.D. on “Infusion rate in enteroclysis examination” at the University of Leiden. After staff memberships at the Departments of Radiodiagnostics at the University Hospital St. Radboud in Nijmegen (1985 to 1987) and the Daniel den Hoed Kliniek in Rotterdam (1987 to1988), he became head of this last Department in 1988. Since September 2000, Professor Oudkerk is full professor and Chair of Radiology at the University of Groningen and is assigned at the University Medical Center Groningen. Since January 2011, he is Medical Scientific Director of the CMI^{NEN} (Center for Medical Imaging – North East Netherlands), one of the Centres of Research Excellence of the IMDI.nl-initiative. He was president of the European Society of Cardiac Radiology (ESCR) from 2003 until 2008, and a member of many national as well as international societies. Professor Oudkerk was Chair of the committee of the Dutch curriculum of Radiology (HORA). He leads the Coordinating Radiology Center of the Prospective Multi-Center Lung Cancer Screening Study (NELSON) since 2000. All 2nd readings have been done under his supervision. It has led to the development of a new management strategy for lung cancer screening as presented in several papers in de New England Journal of Medicine and Lancet. He is (co-) author of 400 articles published in outstanding journals, and editor of several books.

Linda Rabeneck, M.D., M.P.H., FRCPC

Dr. Rabeneck currently serves as Vice President, Prevention and Cancer Control, at Cancer Care Ontario. Dr. Rabeneck is a Professor of Medicine, Professor of Health Policy, Management and Evaluation, and Professor, Dalla Lana School of Public Health at the University of Toronto. Dr. Rabeneck also holds an appointment as a Senior Scientist at the Institute for Clinical Evaluative Sciences (ICES) in Toronto.

Dr. Rabeneck received her medical degree from the University of British Columbia. She completed post-graduate training in Internal Medicine and Gastroenterology at the University of British Columbia and the University of Toronto, respectively. She received her Master's degree in Public Health from Yale University, where she trained as a Robert Wood Johnson Clinical Scholar.

In her current role on the executive team at Cancer Care Ontario, Dr. Rabeneck is responsible for cancer prevention and screening in Ontario. Dr. Rabeneck played a leadership role in launching ColonCancerCheck in Ontario, Canada's first organized, province-wide colorectal cancer screening program. Dr. Rabeneck leads an active research program focusing on the quality and effectiveness of colorectal cancer screening. Dr. Rabeneck currently serves as Chair of the World Endoscopy Organization (WEO) Colorectal Cancer Screening Committee, which meets regularly in the US, Europe and Asia-Pacific region to facilitate sharing of new information on the science and practice of colorectal cancer screening internationally.

Mona Saraiya, M.D., M.P.H.

Dr. Saraiya joined the U.S. Centers for Disease Control and Prevention (CDC) in 1995 as part of the prestigious epidemiology training program known as EIS. She is currently a medical officer, Associate Director for Office of International Cancer Control, at the CDC's Division of Cancer Prevention and Control, largely involved with cervical cancer screening research and policy, but other priorities also include cancer surveillance and strengthening epidemiology capacity internationally. She continues to provide technical expertise to the CDC Breast and Cervical Cancer Program. She is an active member of the CDC HPV Vaccine Workgroup, the Advisory Committee on Immunization Practices (ACIP) HPV Working Group (CDC), and the ACIP Writing Group for the HPV Vaccine. She has been engaged with monitoring the impact of vaccine with a focus on cancer outcomes and cervical cancer screening. She has provided a cancer perspective on the areas of HPV testing for cervical cancer and provided technical assistance on several public and provider education brochures and media.

Nereo Segnan, M.D., M.S.

Dr. Segnan (M.D.—University of Turin and M.S. Epidemiology—Harvard School of Public Health) is the Head of the Unit of Cancer Epidemiology of the Department of Cancer Screening, and of the WHO Collaborating Center for Cancer Early Diagnosis and Screening of the University Hospital "Città della Salute e della Scienza di Torino." He is editor and/or co-author of the European Commission's Quality Assurance Guidelines on Cancer Screenings, of the European Code Against Cancer for Cancer Screening, and of the WHO Position Paper on Mammography Screening. He is currently conducting research on risk-stratification and tailored screening for breast cancer and

comparative effectiveness trials on new technologies for colorectal, breast, and cervical cancer screening.

Robert A. Smith, Ph.D.

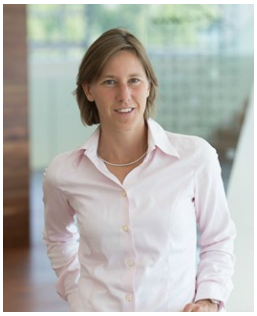
Dr. Smith is a cancer epidemiologist and Senior Director, Cancer Screening at the National Office of the American Cancer Society (ACS) in Atlanta, Georgia. He also is Adjunct Professor of Epidemiology at the Rollins School of Public Health, Emory University School of Medicine, and an Honorary Professorial Fellow at the Wolfson Institute of Preventive Medicine, Barts, and The London School of Medicine & Dentistry, Queen Mary University of London. His primary research interests are cancer epidemiology, evaluation of cancer prevention and early detection programs, quality assurance in the delivery of health services, and cancer rehabilitation and survivorship. He received his Ph.D. from the State University of New York at Stony Brook in 1983. Prior to joining the staff at the ACS, he held positions with the Boston University School of Public Health, and the Centers for Disease Control and Prevention. At the ACS, he leads the development of cancer screening guidelines, and special projects focused on cancer prevention and control, and cancer rehabilitation. He is the author of more than 300 peer-reviewed scientific articles, reports, and book chapters, is a frequent lecturer on cancer screening issues, and serves on many international and national government and professional advisory committees and working groups, including the ICSN meeting planning committee. Dr. Smith was one of the founding members of the National Colorectal Cancer Roundtable, and has served as its Co-Director for 18 years. Dr. Smith is an Honorary Fellow of the Society of Breast Imaging, and in 2004, he was recognized by the National Breast Cancer Awareness Month Board of Sponsors for Outstanding Advances in Breast Cancer. That year, he also received the Cancer Prevention Laurel for Outstanding National Leadership from the Cancer Research and Prevention Foundation. In 2011, he received the Medal of Honor from the International Agency for Research on Cancer (IARC), and in 2012 was awarded the American Society of Breast Diseases Global Pathfinder Award “for visionary leadership in the fight against breast cancer.”

Stephen Taplin, M.D., M.P.H.

Dr. Taplin is the Deputy Associate Director of the Healthcare Delivery Research Program within the National Cancer Institute’s (NCI) Division of Cancer Control and Population Sciences. He is an expert in the field of cancer screening and built his research career around the problems that arose from his clinical experience as a primary care physician. Before joining the NCI, he was responsible for the delivery and evaluation of a breast cancer-screening program serving 100,000 women in an integrated health plan. He joined the NCI as a Senior Scientist in 2003 after being a Professor in the Department of Family Medicine at the University of Washington and an Investigator in the Center for Health Studies at Group Health in Seattle. He has led the development of research into how individuals, groups, and organizations act and interact to affect cancer care delivery. He publishes regularly in peer-reviewed journals, including work on mammography and the conceptualization of problems and interventions in cancer care delivery. His current work is focused on how to consider cancer care interventions addressing individual, group, and organizational factors affecting care.

Kevin ten Haaf, M.Sc.

Mr. ten Haaf has a M.Sc. in Econometrics. His main research areas are the natural history of lung cancer, the evaluation of lung cancer screening effectiveness, and the identification of high-risk individuals for lung cancer screening. He is a member of the Cancer Intervention and Surveillance Modeling Network (CISNET) Lung cancer group and has collaborated on investigating the effectiveness of lung cancer screening. These investigations resulted in a number of peer-reviewed publications and helped to inform the USPSTF on their recommendation for lung cancer screening. He is also affiliated with the Dutch–Belgian Lung Cancer Screening Trial (NELSON trial).



Nicolien van Ravesteyn, Ph.D.

Dr. van Ravesteyn is employed as a researcher at the Department of Public Health, Erasmus MC, University Medical Center Rotterdam, The Netherlands, where she evaluates the effect of breast cancer screening using the microsimulation model MISCAN-Fadia. She has been working with this model since 2008 on various projects on overdiagnosis and mortality reduction of breast cancer screening as well as on the evaluation of breast cancer screening and breast cancer screening policies in different countries (USA, The Netherlands, UK). This research was the basis for obtaining her Ph.D. (*cum laude*) in May 2013. Since then, she has been working as a Postdoctoral researcher on breast cancer screening.

An important part of her research is performed within the Cancer Intervention and Surveillance Modeling Network (CISNET), including modelling work that informed the 2009 U.S. Preventive Services Task Force recommendations for breast cancer screening. In addition, she performed analyses for CDC to help them make decisions on how to respond to a change from film to digital mammography in the NBCCEDP (a program that provides access to breast cancer screening to underserved women). Her recent and current research includes evaluating new screening modalities, such as tomosynthesis and ultrasound for women with dense breasts, more individualized screening (e.g., based on genomic profile), modelling different molecular subtypes of breast cancer, and modelling of different active surveillance strategies for DCIS.

Lawrence (Larry) von Karsa, M.D.

Dr. von Karsa received a B.A. in Biology from Harvard College in 1975. During a Rotary fellowship, he became fascinated with the comprehensive and affordable universal health coverage in West Germany and decided to pursue basic medical training at the University of Tuebingen. After graduation in 1986 and post-graduate training and professional service at the national level in Germany, he received a doctoral degree in medicine from the University of Erlangen-Nürnberg in 1996.

He has served on the Screening Subcommittee of the Committee of Cancer Experts in the Europe Against Cancer Programmes and has been the principal investigator and coordinator in projects funded by the EU Health Programme, including the European Cancer Network for screening and prevention. He is co-PI of the project to update the European Code Against Cancer and is co-editor of the EU quality-assurance guidelines for breast, cervical, and colorectal cancer screening. Previous activities include

monitoring introduction of the German Health Check-up, monitoring the results of the German Cancer Screening Programme, and planning and piloting the population-based Breast Cancer Screening Program based on mammography in Germany.

From 2005 to 2015, he served as Head of the Quality Assurance Group in the Section of Early Detection and Prevention at the International Agency for Research on Cancer (IARC) of the World Health Organization (WHO). In 2013, he served in the Guideline Development Group of the WHO Position Paper on Mammography Screening, and in 2014, he participated in the update of Volume 15 (Breast Cancer Screening) of the *IARC Handbook of Cancer Prevention* series.

David Weller, M.D., Ph.D.

Dr. Weller, an academic general practitioner, graduated from the University of Adelaide Medical School in 1982. He undertook Ph.D. studies in Adelaide and Nottingham, and from 1995 to 2000 was senior lecturer, Department of General Practice, Flinders University of South Australia. He has been the James Mackenzie Professor of General Practice at the University of Edinburgh since 2000 and is currently the Postgraduate Director for Taught Programmes for the College of Medicine and Veterinary Medicine. He is Editor-in-Chief of the *European Journal of Cancer Care*. Current research interests include primary care oncology and medically unexplained symptoms in primary care. He leads the Cancer and Primary Care Research International Network (Ca-PRI) promoting international research collaboration, is a member of the National Cancer Research Institute Primary Care Clinical Studies Development Group (Chair from 2007-2010), and is actively engaged in activities to build capacity in primary care and cancer research in the UK.

Areas of interest: primary care, screening, early diagnosis, follow-up, survivorship and prevention.

Bonnie C. Yankaskas, Ph.D.

Dr. Yankaskas is an epidemiologist and Professor Emeritus of Radiology at the University of North Carolina at Chapel Hill, USA. She created and directed the Carolina Mammography Registry as part of the Breast Cancer Surveillance Consortium for over 15 years. She has led or co-led the International Test Set work group from its inception. She is presently co-principal investigator on a grant from the American Cancer Society to pilot the completed test set.

Ann Zauber, Ph.D.

Dr. Zauber's primary research focus is the impact of screening, surveillance, and chemoprevention on the national burden of colorectal cancer (CRC). Her work involves population-based modeling to inform health policy and randomized clinical trials. She leads a multi-center group of microsimulation modelers from the NCI consortium of the Cancer Intervention and Surveillance Modeling Network (CISNET) to address specific health policy questions in CRC screening. Last year, she was senior author on the clinically significant paper "Should colorectal cancer screening be considered in elderly persons without previous screening?" by Frank van Hees, Dik F. Habbema, Reiner G. Meester, Iris Lansdorp-Vogelaar, Marjolein van Ballegooijen and Ann Zauber, published in *Annals of*

Internal Medicine, 2014:160:750-759. We showed that previously unscreened elderly persons would benefit from and should be offered at least one screening examination. Screening could go on well after age 75 years, with age to stop highly dependent on level of comorbidity. This paper was accompanied by an editorial of "A green banana worth buying in older age: colorectal cancer screening for persons older than 75 years without previous screening."

Dr. Zauber has a Ph.D. in Biostatistics from The Johns Hopkins University and did a Postdoctoral Fellowship in Epidemiology at the University of Pittsburgh. She is a Member in the Department of Epidemiology and Biostatistics at Memorial Sloan Kettering Cancer Center.

Oral Presenters

Oguzhan Alagoz, Ph.D.

Dr. Alagoz is currently an Associate Professor of Industrial and Systems Engineering at the University of Wisconsin-Madison. In addition, he is an associate professor at the Department of Population Health Sciences and serves as the director of National Institutes of Health (NIH)-funded Simulation Center at UW-Madison School of Medicine and Public Health. His research interests include medical decision making, completely and partially observable Markov decision processes, simulation, risk-prediction modeling, and health technology assessment with applications in cancer screening in the US and other countries. He serves on the editorial boards of Operations Research, Medical Decision Making, IIE Transactions, and IIE Transactions on Healthcare Engineering.

Elisabeth Beaber, Ph.D., M.P.H.

Dr. Beaber is an epidemiologist in the Public Health Sciences Division at the Fred Hutchinson Cancer Research Center in Seattle, Washington, United States (US). She trained in epidemiology, with a focus in cancer epidemiology, at the University of Washington in Seattle. Dr. Beaber's current research is focused on improving the screening processes for breast, cervical, and colorectal cancer in the US. She has led cancer screening conceptual model work and is collaborating on numerous studies across different US health care settings within the Population-based Research Optimizing Screening through Personalized Regimens (PROSPR) consortium.

Kerri Beckmann, Ph.D.

Dr. Beckmann is a cancer epidemiologist with an interest in the early detection and treatment of breast, prostate and colorectal cancer. She recently completed her Ph.D. at the University of Adelaide, Australia. Her doctoral studies focused on quantifying the extent of overdiagnosis of breast cancer due to organised mammography screening, using 20 years of data from the South Australian breast cancer screening program. She currently is employed at the University of South Australia as a Research Fellow in the Cancer Epidemiology and Population Health Research Unit, working predominantly in the area of prostate cancer outcomes research.

Tracey Bessell, Ph.D.

Dr. Bessell is the Director of the Cervical Renewal Taskforce in the Australian Department of Health. She has qualifications in pharmacy, public health, and a doctorate in health services research. Prior to

concentrating solely on cervical screening, she had Departmental responsibility for BreastScreen Australia. Dr. Bessell was also the Secretariat for the Standing Committee on Screening, a subcommittee of the Australian Health Ministers Advisory Council (AHMAC).

Lynn F. Butterly, M.D.

Dr. Butterly is a gastroenterologist and Director of Colorectal Cancer Screening for Dartmouth-Hitchcock Medical Center. She serves on the Steering Committee of the National Colorectal Cancer Roundtable, and was the founding chair of the New Hampshire Comprehensive Cancer Collaboration.

Dr. Butterly is the Principal Investigator for the New Hampshire Colonoscopy Registry, which was created as an NCI-funded state-wide, population-based registry on outcomes and quality of colonoscopy. She also is the PI for the CDC-funded New Hampshire Colorectal Cancer Screening Program, which provides free colonoscopies for low-income, uninsured individuals.

After graduating from Harvard Medical School, Dr. Butterly served her medical internship, residency, and fellowship in Gastroenterology at the Massachusetts General Hospital in Boston, and she has focused on the optimization of colonoscopy in colorectal cancer screening for over 20 years.

Christine Campbell, Ph.D., M.P.H., B.Sc. (Hons)

Dr. Campbell is a health services researcher at the University of Edinburgh. Her current research portfolio includes UK and international studies examining influences on screening participation, and examining the role of primary care in screening provision and symptomatic diagnosis. Areas of research interest include inequalities in screening participation, the interface of primary care and cancer screening programmes, and provision of cancer screening in low-resource settings. She chairs the Screening subgroup of the UK's NCRI Primary Care Clinical Studies Group, and is involved in Ca-PRI, the international primary care and cancer research network.

Sam Li-Sheng Chen, Ph.D.

Dr. Chen graduated from Taiwan National Yang Ming University and then performed postdoctoral work on cancer screening evaluation in Finland at Tampere University and in Taiwan at the National Taiwan University. From 2007 to 2010, he was Vice-Chief at the Cancer Center in Changhua Hospital. He returned to Taipei in 2010 and is currently Faculty at the School of Oral Hygiene, College of Oral Medicine, Taipei Medical University. He works with many local and national governments, professional advisory committees and working groups. His research interest is the evaluation of the cancer screening programme, with an emphasis on the methodology development.

Han-Mo Chiu, M.D., Ph.D.

Professor Chiu received his bachelor's degree from Taipei Medical University in 1995 and received resident training in National Taiwan University Hospital (NTUH) from 1997 to 2000, including 2 years' Fellowship of Gastroenterology and Hepatology. He also obtained his Ph.D. degree from the Institute of Preventive Medicine of National Taiwan University (NTU) in 2010.

Professor Chiu is currently the Clinical Associate Professor of NTU and an attending physician of NTUH. His major research and clinical interest includes colorectal cancer (CRC) screening, and endoluminal therapy (EMR/ESD) for colorectal neoplasm. He is now playing a key role in the Taiwanese nationwide CRC screening program and colonoscopy quality improvement project.

Sherry Yueh-Hsia Chiu, Ph.D.

Dr. Chiu is an Assistant Professor in the Department of Health Care Management, College of Management at Chang Gung University since September 2009. She earned her Ph.D. in Health Informatics and Decision Making from National Yang-Ming University, Taiwan, and she also was a research fellow at Tampere School of Public Health and Finnish Cancer Registry (2007-2009) under Finnish-Taiwanese academic collaboration project. Her current research interests include preventive medicine, design and evaluation for screening, and evaluation for health informatics. She is also an active member of the International Asian Conference on Cancer Screening (IACCS) to join the screening network and education program for developing countries.

Gloria Coronado, Ph.D.

Dr. Coronado is a Senior Investigator at Kaiser Permanente Center for Health Research. Dr. Coronado's research involves partnering with federally sponsored health centers to improve health outcomes, particularly among low-income and underserved populations. She has developed several innovative programs to improve rates of participation in cancer screening and follow-up care. With Dr. Beverly Green, she co-directs the Strategies and Opportunities to STOP Colon Cancer in Priority Populations study (STOP CRC)—a large pragmatic trial that uses a direct-mail approach to boost rates of colorectal cancer screening among 26 partnering community health centers in Oregon and California.

Miriam Elfström

Ms. Elfström is finishing her doctoral work in Epidemiology at the Karolinska Institute in Stockholm, Sweden. The focus of her work is optimizing cervical cancer prevention through screening and HPV vaccination. She is part of the EU CoheaHr project, which aims to provide an evidence-base to enable informed decisions on HPV prevention strategies. In Sweden, Ms. Elfström has worked on HPV testing as a primary cervical screening tool and a nation-wide audit of cervical cancer cases. She is particularly interested in health systems strengthening and has worked on evaluating organization and quality assurance of cancer prevention programs.

Berta Geller, Ed.D.

Dr. Geller is a Professor Emerita of Family Medicine at the University of Vermont, and has been active in the International Cancer Screening Network (ICSN) since 1997. She chaired the ICSN Communications Working Group that wrote the NCI publication "Designing Print Materials: A Communications Guide for Breast Cancer Screening." In addition to improving cancer screening, Dr. Geller's research interests are cancer survivorship and informed decision making. Over the past 10 years, she has been very interested in understanding how best to provide audit eedback to mammographers and this work can be found in several publications. Currently living on an island in Massachusetts, she telecommutes to participate in PROSPR, as well as projects related to the accuracy of both breast and melanoma pathology.

Sandra Geurts, Ph.D., M.Sc.

Dr. Geurts is a clinical epidemiologist at the Radboudumc Nijmegen, The Netherlands. She obtained her M.Sc. degree in Nutritional and Public Health Epidemiology at Wageningen University, The Netherlands in 2008. In 2008-2012, she studied the effectiveness of routine follow-up after treatment for ovarian and breast cancer and obtained her Ph.D. in 2013. Dr. Geurts worked as a Postdoctoral Researcher and teacher at the Radboudumc. In 2014, she worked at the Centre for Cancer Prevention, Queen Mary University of London, UK, and determined the likely effect of adding once-only flexible sigmoidoscopy to the English NHS Bowel Screening Programme.

Jennifer S. Haas M.D., M.S.P.H.

Dr. Haas is a Professor of Medicine in the Division of General Internal Medicine and Primary Care at Brigham and Women's Hospital and Harvard Medical School, and in the Department of Social and Behavioral Health at the Harvard School of Public Health. She is a practicing general internist with a Master's Degree in Health Policy from the Harvard School of Public Health. Dr. Haas is the Co-Director of the Harvard Catalyst (CTSC) Health Disparities Research Program. She received a B.S. from Yale University in Molecular Biophysics and Biochemistry and Chinese Studies, an M.D. from Harvard Medical School, and a Master's of Science from the Harvard School of Public Health. She completed a residence in primary care internal medicine at the University of California, San Francisco, and fellowship training in general internal medicine at Brigham and Women's Hospital.

Dr. Haas' research has focused on elucidating and reducing racial/ethnic and socioeconomic disparities in health care and outcomes, with a particular focus on cancer control and prevention. Her research also focuses on how to use systems-based approaches to improve the use of screening and prevention in primary care, and how health information technology can improve the flow of information between patients and providers.

Summer Han, Ph.D.

Dr. Han received her Ph.D. in Statistics at Yale University and she worked as a Research Fellow in the National Cancer Institute (NCI), where she developed several statistical methods for analyzing genome-wide associations studies data. She's currently working as a staff scientist in the Department of Radiology at Stanford University. Her research focuses on modeling population-level screening for lung cancer, and she's collaborating with investigators in the NCI consortium CISNET Lung Group. She recently led a consortium project for assessing the impact of overdiagnosis on the selection of efficient lung screening strategies using a comparative modeling approach, which is the topic of her talk.

Hormuzd Katki, Ph.D.

Dr. Katki is a biostatistician and cancer researcher at the National Cancer Institute. He proposes a framework for developing risk-based screening guidelines based on the principle of "Equal management of people at equal risk." As a practical example, he will show how "equal management of equal risks" was used to develop the new U.S. cervical cancer screening guidelines that incorporate both HPV and Pap testing. He will demonstrate how the principle might be used for developing guidelines for risk-based CT lung cancer screening. He will finish by showing the official online risk tool for cervical screening, and an example online risk tool for lung screening.

Beatrice Lauby-Secretan, Ph.D.

Dr. Lauby-Secretan has education and Postdoctoral training in Biochemistry, Toxicology and Cancer Cell Biology. She has worked for the IARC Monographs since 2002, primarily as expert for the characteristics of the agent and exposure assessment. She is the responsible officer for Monographs on, among others, tobacco smoking, alcoholic beverages, bitumens, polychloro- and polybromobiphenyls, and perfluorooctanoic acid (Volumes 100E, 103, 107, 110). Dr. Lauby-Secretan is Involved in the *IARC Handbooks on Cancer Prevention*, namely on cervical cancer screening and tobacco control. She is responsible for the relaunch of the *Handbook* series after a 5-year interruption, and for the preparation of Volume 15 on Breast Cancer Screening. The next *Handbook* meeting is planned for April 2016.

Reinier Meester, M.S.

Mr. Meester is a Ph.D. student of the Department of Public Health at the Erasmus MC University Medical Center. His interest is in colorectal cancer screening and statistical modeling, and focuses on performance indicators and their relation to cost-effectiveness of screening. His research is conducted as part of the research consortium Population Based Research Optimizing Screening through Personalized Regimens (PROSPR) funded by the National Cancer Institute.

Sue Moss, Ph.D., M.Sc. B.Sc.

Dr. Moss is an epidemiologist who has worked for over 30 years in the field of evaluation of cancer screening for cancer sites, including breast, cervix, bowel, and prostate. Her research has included both the conduct and analysis of screening trials, and the monitoring and evaluation of service screening programmes. Her current position is Professor of Cancer Epidemiology at the Centre for Cancer Prevention in the Wolfson Institute, Queen Mary University of London, United Kingdom.

Steffie Naber

In 2012, Ms. Naber graduated in Econometrics and Management Science at the Erasmus University in Rotterdam. Currently, she is a Ph.D. student at the Department of Public Health of the Erasmus Medical Center in Rotterdam. Her research focusses on improving the effectiveness and cost-effectiveness of cervical cancer screening in The Netherlands, and of colorectal cancer screening in the United States. To this end, she uses the MISCAN microsimulation model to inform the National Institute for Public Health and the Environment (RIVM) and the U.S. Preventive Services Task Force on the expected benefits and harms of several screening strategies.

Nora Pashayan, Ph.D., M.S.

Dr. Pashayan is a senior clinical lecturer in applied health research at University College London and Cancer Research United Kingdom (UK) Clinician Scientist Fellow. Her research interest is in cancer screening and in translating genomics into population-based prevention programmes. Dr. Pashayan has a clinical background, with specialisation in both family medicine and public health medicine. She has a Master's Degree in Epidemiology and in Public Health, and a Ph.D. awarded from the University of Cambridge funded by Cancer Research UK training fellowship in studying the natural history of prostate cancer and the implications of genetic predisposition for personalised screening.

Lawrence Paszat, M.D., M.Sc., FRCPC

Dr. Paszat is Senior Scientist at the Institute for Clinical Evaluative Sciences in Toronto, and Principal Investigator of the Ontario Cancer Screening Research Network. He also is a part-time radiation oncologist and was involved in the care of women with breast cancer from 1982 to 2013.

Kine Pedersen, M.Phil.

Mr. Pedersen has a Master's of Philosophy (M.Phil.) in Health Economics, Policy and Management from the University of Oslo, Norway. She currently is a Ph.D. candidate at the Department of Health Management and Health Economics at the University of Oslo. Her research focuses on health policy issues related to cervical cancer screening.

Douglas Perin, M.P.H.

Mr. Perin is an ASPPH/CDC Public Health Fellow working with the Office of International Cancer Control, in the Division of Cancer Prevention and Control–CDC/National Center for Chronic Disease Prevention and Health Promotion in Atlanta, GA. His research includes the epidemiology of cancer prevention and control, mainly cervical, breast, and colorectal cancers; and its translation from data to action. He received his M.P.H. from the University of Nebraska Medical Center. He was an intern in the International Agency for Research on Cancer, where he worked with the Section of the Monographs; and in the Section of Early Detection and Prevention.

Valerie Sankatsing

Ms. Sankatsing is a Ph.D. student at the Public Health Department of the Erasmus Medical Center in Rotterdam, The Netherlands. Her research focuses on breast cancer screening in The Netherlands, including both the effects of current screening and the cost-effectiveness of alternative screening strategies or screening tests. During the Bachelor Biomedical Sciences at the Utrecht University, Ms. Sankatsing became interested in the field of epidemiology and therefore switched to a public health related Master at the VU University in Amsterdam.

Geordan Shannon, BMed (Hon.), M.P.H. (Hon.)

Dr. Shannon is an Australian doctor working in public health, with a particular emphasis on gender equity, Indigenous health, and human rights. At present, she is undertaking her Ph.D. at University College London, focusing on gender equity and women's health outcomes in Peruvian Amazon communities. Whilst in Peru, she is working closely with DBPeru, a small health NGO, which provides health education and outreach to communities of the Lower Napo River in Loreto province. She is the medical lead in the DBPeru ABCS Project, providing a community-based participatory model of cervical cancer prevention.

Linda Sharp, Ph.D., M.Sc., B.Sc. (Hons)

Dr. Sharp is a Professor of Cancer Epidemiology at Newcastle University. Before moving to England in January of 2015, she was, for 10 years, the research lead at the National Cancer Registry in Ireland. She has a long-standing interest in evaluating the costs and benefits of cancer screening for the individual

and population. She has undertaken projects on: the psychological impact of screening and diagnostic investigations in cervical and colorectal cancer; the role of HPV testing in cervical screening; factors influencing uptake of colorectal cancer screening; cost-effectiveness of colorectal cancer screening; and cost-effectiveness of PSA testing for the secondary prevention of prostate cancer.

Malliga J. Subramanian, M.D.

Dr. Subramanian is trained in Gynecologic Oncology and Preventive Oncology. Currently, she is in charge of the Department of Preventive Oncology at Cancer Institute (WIA). The Department focuses on a multi-disciplinary approach towards cancer control by integrating clinical, epidemiological and molecular research divisions. Research initiatives are undertaken to generate evidence and develop best practices suitable for community-based application in prevention and early detection of common cancers.
Dr. Subramanian's area of interest is prevention and early detection of common women cancers—cervix and breast—and she has over 9 years of experience in the field.

Sujha Subramanian, Ph.D.

Dr. Subramanian, a Fellow in Cancer Economist and Policy Research at RTI International, has extensive experience performing economic evaluation of cancer programs and cost-effectiveness assessments of cancer screening. Over the past 15 years, she has directed several program evaluations in the U.S., including the assessment of breast, cervical and colorectal cancer screening programs. In collaboration with the World Health Organization's International Agency on Cancer Research, she is assessing the implementation of visual inspection, HPV screening and HPV vaccination for prevention of cervical cancer; clinical breast examination for early detection of breast cancers; and visual inspection for early diagnosis of oral cancers.

Karin Sundström, M.D., Ph.D.

Dr. Sundstrom is a medical doctor and cervical cancer epidemiologist at the Department of Laboratory Medicine, Karolinska Institutet in Stockholm, Sweden, at the university where she gained her medical degree in 2009 and her Ph.D. in Epidemiology in 2013. Her focus is human papillomavirus (HPV)-based prevention of cervical cancer, i.e., HPV vaccination and HPV-based screening. She works with the safety and effectiveness of cytological screening and risk stratification of HPV-positive women. As such, she was recruited as a Research Coordinator for the Nordic Information for Action eScience Center (NIASC), which aims to develop individualized strategies for screening-preventable cancer forms.

Jeroen van den Broek, M.S.

Mr. van den Broek is an employee of the Early Detection Division of the Public Health Department at Erasmus Medical Center in Rotterdam. He is performing research on the evaluation of breast cancer screening. He has experience with microsimulation modeling, in particular with a model called MISCAN-Fadia that has been developed at the Public Health Department at Erasmus Medical Center. His fields of study are econometrics and quantitative finance. It is his goal to contribute to the research on breast cancer screening by combining his quantitative background and acquired knowledge about breast cancer screening.

Miriam van der Meulen, M.D.

Dr. van der Meulen graduated in 2011 as a Medical Doctor at the University of Groningen and is currently enrolled in the Master of Health Science, specialization in Public Health at the Netherlands Institute of Health Science. She is a Ph.D. student at the Department of Public Health of the Erasmus Medical Center in Rotterdam. Her research focuses on colorectal cancer screening in The Netherlands. In most of the analyses, she uses the MISCAN microsimulation model to estimate the effectiveness and cost-effectiveness of different colorectal cancer screening programs.

Frank van Hees, M.Sc.

Mr. van Hees obtained his M.Sc. in Biomedical Sciences (Major: Epidemiology; Minor: Health Technology Assessment) from the Radboud University Nijmegen and a postgraduate degree in Health Economics from the University of York. As a member of the Cancer Intervention and Surveillance Modeling Network (CISNET), his primary research focus is on personalizing screening decisions in elderly individuals in the
U.S. However, he also informed the decision to implement a national CRC screening programme in The Netherlands, the recent changes that were made to that programme (the topic of his presentation), and the new Dutch guidelines for surveillance in adenoma patients.

Yuqian Zhao, B.S.

Ms. Zhao received her Bachelor's degree in Public Health from Huaxi Medical School of Public Health, Sichuan University in 2011. She is currently a Ph.D. candidate in Epidemiology and Biostatistics in the National Cancer Center, Cancer Hospital of Chinese Academy of Medical Sciences (NCC/CHCAMS) and Peking Union Medical College (PUMC). Her research interests are in primary and secondary prevention of cervical cancer. She is working on a Phase III clinical trial of domestic bivalent HPV vaccine in mainland China and participating in study design and preparations for a demonstration study of appropriate screening techniques for cervical cancer screening across the country, supported by the government.