

Special Report

Nutrition Leadership Training in North-East Asia: an IUNS initiative in conjunction with nutrition societies in the region

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Food for humans is one of the most important of all global issues. It is a critical determinant of planetary and individual health, of economic development, of how sustainable energy and water supplies are, and its security a powerful determinant of peace or conflict. Those who assume leadership for the integrity of food and health systems have great responsibility. The IUNS (International Union of Nutritional Sciences), regional and national nutrition science and food technology organizations have concern about the leadership capacity available and required in what are rapidly changing and increasingly demanding circumstances. These include persistent poverty and hunger, climate change which threatens the sustainability of food production and fragile financial systems which are making food less affordable for many. North East Asia (NEA) is a major region for its population size, its economic wealth and disparities, its food production, its life expectancies among the best and its global reach. In 2008, for those of Chinese ancestry and of wider Asian origin, Nutrition Leadership training has been conducted in Hangzhou, Shanghai, Seoul and Taiwan (Hsinchu and Zhunan). Ninety prospective young leaders participated in all. Several successful early career Asian nutrition scientists and professionals served as role models. Senior colleagues acted as mentors for groups of 2 or 3. With mentors, the concept of leadership has been examined, careers and roles explored, knowledge and skills honed for a different future, and plans made to network in mutual support. Early feedback indicates that new opportunities have been created and seized.

Key Words: IUNS, Chinese Nutrition Society, Korean Nutrition Society, Taiwan Nutrition Society, capacity building, leadership development, Zhejiang University, Fudan University, Huadong Hospital, Seoul National University, NHRI

INTRODUCTION

The International Union of Nutritional Sciences (IUNS) has conducted Nutrition Leadership training programs for several years after Capacity Building guidelines were developed by it and the United Nations University (UNU) in Manila in 1996. The Manila workshop had principally to do with "Institution-Building for Research and Advanced Training in Food and Nutrition in Developing Countries". It was antedated by a similar initiative, now 30 years ago, in Cairo in 1978 at a meeting convened by the UNU and the Subcommittee on Nutrition of the UN Administrative Committee on Coordination. That meeting "emphasized the special need for regional (nutrition) training institutions in Africa". In 1994 the European Nutrition Leadership Program (ENLP) was initiated which

concentrated on public and private sector needs for nutrition leadership in Europe with some reference to nutrition in economic development. Thus, the leadership training pendulum swung between economic and health extremes over some 20 years and generally involved the UN system. During this period of recent history, concern about nutrition leadership in Africa¹ has continued and

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became a particular focus during the IUNS Presidency of Professor Wahlqvist between 2001 and the IUNS Congress in Durban, South Africa in 2005. The IUNS and IUFOST (International Union of Food science and Technology) collaborated in an on-line capacity building project for appropriate food technology training in Africa; the International Science Council (ICSU) initiated the Sciences for Health and Well-Being program with an emphasis on Africa and involving IUNS; a promising partnership between Information Technology and Nutrition in Africa (ITANA) involved young leaders. Moreover, the importance of early life nutrition on long-term health was becoming clearer as was the complex interplay between energy balance (deficits and excess) and dietary quality (food component deficiencies and excesses), contributing to a spectrum of nutritionally-related disease (NRD).² The combined interests of the IUNS-UNU (United Nations University) Capacity Building initiative and those of UNICEF to enlarge the international, regional and national Nutrition Programme Workforce and Leadership in Nutrition were developed at UNICEF in July 2003. At the Durban meeting, the opportunities for a collaborative effort between Africa and Asia (especially China and India) were explored. This has stimulated leadership programs in Asia with one on Leadership Skills in Food and Nutrition for National Development held in Mysore, India in 2006³ and a review workshop at the Federation of Asian Nutrition Societies (FANS) conference in Taipei, 2007.

An associated development, from 2001, in Capacity Building in Nutrition and Leadership training was that of institutional research programs infection and nutrition, together responsible for most of the global burden of disease. This was supported by a USD 5 million grant from the Ellison Medical Foundation which enabled collaboration between the International Nutritional Foundation, the SCN (Standing Committee on Nutrition) of the UN System. The UNU and the IUNS. This was put to great effect in Africa and South East Asia (SE Asia). In the case of SE Asia, the team which managed the initiative were Dr Emorn Wasantwisut from Thailand, Dr Geok Lin Khor from Malaysia and Dr Widjaja Lukito from Indonesia.³

Economic development has been particularly rapid in North East Asia (Japan, China, Taiwan and South Korea). The region has limited nutrition leadership, yet great potential to contribute not only to its own food-health situation, but also to that of the world at large. This is on account of its population (more than a quarter of the world's) or human capital with its education, its belief systems, its fiscal resources, its technologies and its science. Thus, during 2008, three Nutrition Leadership Training programs have been conducted in China (Hangzhou and Shanghai), Korea and Taiwan. The details are presented in this report.

The issues confronting food and nutrition science and professional life are unfolding in new directions and some of these are quite unclear (Table 1).⁴⁻⁶ This makes the imperative to fast track a new generation of nutrition leadership more pressing. It has been encouraging in this year 2008 of energy, food and financial crisis that senior and established nutrition leaders in NE Asia have worked

Table 1. Confronting issues for the emerging nutrition leadership

- ❖ Nutritional status is the basis, with infection and trauma, of most of the global burden of disease (Millennium Development Goals, MDGs, for 2015 of UN System)⁸
- ❖ Abject poverty and hunger affect at least 1 billion (1 in 6) of the world's population (MDG number one)
- ❖ Food is the 3rd largest part of world trade
- ❖ Arable land and water shortage, excessive use of non-renewable energy and biofuels, with climate change threaten food security and affordability⁹
- ❖ EBN (Evidence-based Nutrition) is required to inform resource allocation (food, nutritional and health economics)¹⁰
- ❖ Local, regional and international health policy requires food and nutrition science inputs¹¹
- ❖ Nutrition is multidisciplinary and collaborative, integrative and co-coordinating capacity is required for its effectiveness in food, education and health system policies
- ❖ Planetary health as well as the human condition needs urgent attention¹²

tenaciously "to pass the baton" to their younger counterparts whilst being available as mentors.

What follows are 3 reports from NE Asia (China, Korea and Taiwan) of Nutrition Leadership Training programs held during 2008. Whilst much has been written about leadership,⁷ the experiences of the trainees and their mentors has intrinsic value for the field of nutrition as it develop through various career optional and through ongoing research and policy development.

CHINA

The IUNS-CNS Chinese Nutrition Leadership Training Workshop, organised by Prof.s Duo Li, Jianqin Sun, Keyou Ge, and Mark L Wahlqvist at the Department of Food Science and Nutrition, Zhejiang University, Hangzhou, Huadong Hospital, Fudan University, Shanghai, China with the Chinese Nutrition Society, Beijing, China and IUNS.

A workshop was held from 6th - 9th June 2008 at Zhejiang University, Hangzhou and Huadong Hospital, Shanghai (Table 2). Fifteen mentors (one from each of Australia, Korea and USA, and three from Taiwan) and 44 trainees (from 26 provinces and cities directly under the jurisdiction of the central government and including 6 trainees from Taiwan) participated in the workshop.

A leader should be ethical, informed, capable of role devolution and organizationally or institutionally-directed. A leader should have vision, integrity, courage and good judgment, the capacity to decide and persuade, fortitude, authority, and be able to inspire confidence in others. A leader should understand central and local government policies and regulations that are related to food and nutrition issues, and should be veracious and sensitive to the demands of various sectors. For a leader, the most important skill is to have outstanding communication skills both internally and externally. Public relations are required on a continuing basis to communicate and exchange information with the media, government and relevant services in order to disseminate reliable knowledge and create a professional brand effect. The essence of

public relations is the ability to handle unexpected events with equanimity. A leader must be able to lead a team or agency in such a way that projects are executed in timely fashion and problems resolved. A leader must also have good ability in expressing themselves in writing. The main purpose of public relations is to find common ground between media and customer demand so as to maximize the result of dissemination results.

The role of nutritionists is primarily to help people differentiate and obtain reliable and meaningful information. The role of a dietitian, which is characterized by skills to work with individuals as well as institutions, needs to expand beyond clinical nutrition and hospital food service into multiple sectors, such as catering, counseling, consulting, media, non-government organization (NGO)/non-profit organization (NPO) and the community-at-large. The skill set of a dietitian needs to be diverse. With dietetic work-forces being relatively scarce in relation

their demand, they need to have leadership qualities for and beyond their profession. The role of nutritionists is becoming more recognized in Chinese-speaking society. The service of nutritionists encompasses diet planning, counseling, nutrition education and strategic planning for those who have diet-restrictions and high health-risk populations. The goal of all nutritionists is to encourage people to eat healthy and thereby live happily.

Nutrition research depends not only on administration of national organization and planning, but also on the administration of Universities, research institutes, as well as root-level scientific unit or individual researchers. PhD research is an important part of nutrition research. The objective of PhD research was to cultivate independent researchers. An independent researcher should have the capability to conduct a research project by himself/herself, which includes project design, funding application, laboratory work, data collection, data analysis, reporting of

Table 2. Schedule of Chiese Workshop

Time	Friday, 6 th June 2008	Saturday, 7 th June 2008	Sunday, 8 th June 2008	Monday, 9 th June 2008
08.30-09.00	Session 1	Session 7	Departure to Shanghai	Session 17
09.00-09.30	What is leadership and why does nutrition need it? Mark Wahlqvist, Hee Young Paik, Keyou Ge	Translational nutrition science: Action oriented Junshi Chen		Eminent nutrition scientist My Career in Nutrition Science Pao-Hwa Lin
09.30-10.00	Morning Tea			Morning Tea
10.00-10.30	Session 2	Session 8		Session 18
10.30-11.00	Nutrition publishing (article drafting) Jingfan Gu, Duo Li	Evidence based nutrition, WCRF report Junshi Chen, Mark Wahlqvist		Reports from future leaders Ray-yu Yang, Pianhong Zhang, Jianjun Yang, Chunji Han, Wen Hu, Shufang Zhang
11.00-11.30	Session 3	Session 9		Session 19
11.30-12.00	Inter-agency cooperation and social mobilization – experience and lessons Jianbin Jia	Scenario planning and policy development of food and nutrition Xiaoguang Yang		Future directions and closing, confer the certificate Mark Wahlqvist, Keyou Ge, Junshi Chen
12.00-13.00	Lunch			
13.00-13.30	Session 4	Session 10		Session 13
13.30-14.00	The Future of Nutrition Science Global: Mark Wahlqvist	The Future of Nutrition Science Chinese Communities: Pao-Hwa Lin		What is Clinical Nutrition? International Perspective: Mark Wahlqvist China Perspective: Jiangqin Sun
14.00-14.30	Session 5	Session 11		
14.30-15.00	PhD research Duo Li	Nutrition research project management Yiyong Cheng		
15.00-15.30	Session 6	Session 12		
15.30-16.00	Aspirations and plans of younger nutrition scientists (This session taken place in various scenic spots around the West Lake)	Field nutrition project management Keyou Ge		Session 14 Young clinicians plans for CN careers Xiaojun Liu, Meng-Chuan Huang
16.00-16.30	Meei-Shyuan Lee Yanfang Wang	Tour of Zhejiang University, Dinner Duo Li		Session 15 Building multisectoral dietetic careers with leadership Jingfan Gu, Frances Ma
16.30-17.00				Session 16 Creating a Chinese-speaking nutrition leadership network Keyou Ge, Bonnie Sun Pan
17.00-17.30				Dinner
17.30-18.00				
18.00-	Dinner at Teahouse			

information and article preparation. "If it's not written, it's not research". For publications, most importantly, the editor, examiners and readers need to be assured the author has an in depth understanding of the chosen area. The authors should always keep in mind your paper is written for the reader, and they must understand what is being communicated. Scientific papers differ from fictional novels; a good novel allows the reader to explore possibilities with their own imagination. However, a good paper is logical, easy to understand, and well defined. Acceptance of a paper is dependent on three factors: novelty, significance and presentation (writing, conciseness and depth).

Future nutritional science should place greater emphasis on economic development and prosperity, environment, education, dignity and happiness, and the sustainability of our planet and how they each and all relate to human health. Evidence-based nutrition (EBN) has gained currency as part of the growing role of evidence-based medicine (EBM) to increase the validity, utility and cost-effectiveness of both clinical practice and, increasingly, public health endeavours.¹⁰ The most substantial and rigorous reports about diet and cancer in recent years have emanated from the combined efforts of the World Cancer Research Fund and American Institute for Cancer Research.¹³ The application of NaFeEDTA fortified soy sauce in the control of iron deficiency and iron deficient anemia in China as a typical example of New Nutritional Sciences in practice. As China continues to grow economically and become more globalized, it is facing similar challenges in nutrition and health as developed countries. Further, China's rapid transition from a traditional Eastern to a Westernized lifestyle presents a unique opportunity to study the etiology of many diseases. Thus, the experience of developed countries in the development of nutrition science can and should serve as an important learning tool for the Chinese nutrition science communities.

Seven young trainees made brief introductions about their education and where they work, what they work for, how they work, challenges and expectations. The Workshop ended with awarding of certificates of the IUNSCNS Nutrition Leadership Training Workshop. It was a very successful workshop, all mentors and trainees participated from opening to closing. Every young trainee completed a questionnaire, principally every trainee was satisfied with this unique workshop, especially with the 1:3 arrangement, i.e., one mentor looking after three trainees. Based on the feedback, we will modify the program accordingly for next year's workshop. A Chinese Young Nutritionists network has been established including a web-site which has all the PowerPoint presentations, photos, references and related materials from the workshop.¹⁴ (<http://www.apcns.org.cn/Study-Leader.html>)

KOREA

International Workshop on Capacity and Leadership Development in Nutritional Sciences, organised by Profs Hee Young Paik, Sung Hee Cho, and Ricardo Uauy at the Department of Food and Nutrition & Human Ecology Research Center, Seoul National University, with the Korean Nutrition Society and IUNS

- **Date: September 4~6, 2008**
- **Venue: Hoam Faculty House, Seoul National University, Seoul, Korea**
- **Organized by: the International Union of Nutritional Sciences and the Korean Nutrition Society**

- **The purpose:**

1. To promote leadership skills among young nutrition scientists of Asia
2. To strengthen capacities for innovation and cooperation
3. To build a network of the next generation of leaders among the Asian nutrition science field

- **The target audience**

Young nutrition scientists in Asia and Australia at an early stage of their career were the main target audience. Twenty-eight prospective participants were accepted from fourteen countries at the initial screening. Two candidates declined the opportunity due to personal circumstances; one participant had to leave after the first day of the workshop due to a personal reason. A total of twenty-five young scientists from thirteen countries, Australia, Bangladesh, China, India, Japan, Malaysia, Mongolia, Korea, the Philippines, Singapore, Sri Lanka, and Vietnam, finished all sessions and received a certificate.

Nutrition Society of Australia provided full support of their nominee. Nutrition Society of Malaysia and Nutrition Society of Japan provided air tickets for one participant from their country. Expenses for all other participants were fully covered by the Workshop organizers.

- **The methods (eg groups):**

Participants were assigned to groups of two or three members by the local organizing committee. Members of the groups were carefully selected to maximize diversity within each group in terms of nationality, profession, expertise, etc. Each group was also matched with a mentor and a host. Invited speakers and the local organizing committee members served as a mentor and a host, respectively. Participants were encouraged to associate with their group members during the sessions, meal time, breaks and other free time. Each participant was also assigned to have a roommate who was not a member of their team. These arrangements allowed more interactions among participants as well as with their mentors.

- **Program**

This workshop offered opportunities to build up leadership skills and to strengthen scholarship skills to the participating young nutritionists. Building a long-lasting human network among the young invited scholars was also heavily promoted. The program included, in seven sessions, presentations by nineteen speakers, group discussion and activities for the participants. The program schedule is presented in Table 3.

- **Program Description**

The international workshop program was largely divided into five sections: 1) Capacity development for leadership, 2) Leadership roles for nutritionists, 3) Pro-

fessional writing for nutritionists, 4) Nutrition in Asia, and 5) a Field trip.

- ◆ The “Capacity development for leadership” was designed to provide necessary skills to become an effective leader. A total of three sessions were created for this section: a) leadership development, b) coaching skills, and c) communication skills. The capacity development for leadership: Leadership development (*Session I, Sept. 4., 9:00 – 11:30*) was led by Dr Susan Youngsoon Gimm at the Korea Leadership Center. Dr. Gimm conducted a highly interactive session to help participants think about what leadership is and what is required to become a leader. Some of the topics covered in the session included self-leadership, leadership to others, maturity continuum, competence vs. character, etc. The capacity development for leadership: Coaching skills (*Session IV, Sept. 5., 9:00 – 11:30*) was another interactive session led by Dr Gimm. In this session, participants learned definition, utility, and effective skills of coaching. The capacity development for leadership: Communication skills (*Session V, Sept. 6, 9:00 – 11:30*) provided participants opportunities to learn how to work with mass media, benefits and risks of working with media, and effective ways to work with other health professionals. Dr Hoon Shim at Hallym University, Dr Johanna Dwyer at Tufts University, and Dr Hyungwook Baik at Daejin University shared their expertise on this topic.
- ◆ The “Leadership roles for nutritionist (*Session II, Sept. 4, 13:00 – 14:40*)” covered topics such as educating, mentoring, and research and professional activities. The topic of Educating/ Mentoring was discussed by Dr Won Song at Michigan State University, where importance of educating oneself and others were emphasized. Dr Mark Wahlqvist at Monash University, Australia laid out roles of leadership in nutrition research and professional activities. He discussed various possible career options for nutritionists, nutrition research goals and processes, and importance of a new nutrition leadership.
- ◆ The “Professional writing for nutritionists (*Session VI, Sept. 6, 13:00 – 14:40*)” taught basic and practical knowledge on how to write good grant proposals and for prominent academic journals. Dr Teresa Davis at Baylor College of Medicine discussed the process of writing a good research grant proposal from starting with a good research question to being persistent in pursuing funding sources for the good research question. Dr Davis also provided useful practical tips in writing a grant proposal with high potential for success. Drs Duo Li at Zhejiang University, China and Meei-Shyuan Lee at National Defense Medical Center, Taiwan discussed issues with writing for publication. Necessary components for a manuscript for publication were reviewed and practical guidelines were also provided with an example of Asia Pacific Journal of Clinical Nutrition.
- ◆ Several sessions belonged to the Nutrition in Asia section. Country reports, taking place throughout the workshop, provided snap shots of current nutritional status and nutrition problems of participating countries. Participating countries were Australia, Bangladesh, China/Taiwan, India, Indonesia, Japan, Korea, Malaysia, Mongolia, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, and Vietnam. Learning current nutritional status and nutrition problems of each country helped to clarify what problems are general or unique in Asia and Australia. Another session under the Nutrition in Asia was Short Presentations from the invited participants. The invited participants were asked to prepare a short presentation on their background and current research/practices to introduce themselves to the audience. These short presentations were delivered in four groups throughout the workshop and were valuable in facilitating the networking among the participants.
- ◆ The last session of the Nutrition in Asia was Capacity Development for Actions (*Session VII, Sept. 6, 15:40 – 18:00*) to promote networking and collaboration across nations and among all participants. Dr. Suzanne Murphy at University of Hawaii pointed out how research and policy should and are inter-related through five examples: setting nutrient standards, specifying food-based dietary guidance, conducting national nutrition surveys, selecting criteria for food labeling, and designing nutrition assistance programs. Partnership with food industry was discussed by Dr. V. Prakash at Central Food Technology Research Institute, although the presentation itself had to be delivered by Dr. Uauy because an unforeseen and urgent meeting prevented Dr. Prakash from attending the workshop. Dr Uauy of the University of Chile and current President of the International Union of Nutritional Science urged participants to think about the nutrition problems, not only of their own country but also of the world. He highlighted the *Lancet’s* series on maternal and child undernutrition 2008. Current consensus of effective international action against undernutrition was discussed in areas such as international nutrition system and nutrition action. Dr. Pattanee Winchagoon at Mahidol University reported the preparation status for the International Congress of Nutrition, 2009.
- ◆ The Field Trip (*Sept. 5., 13:00 – 18:00*) took the participants to the *Seochogu* Public Health Center, Kimchi Museum, and an open market. Public health centers in Korea used to be a clinic providing primary medical care to low-income individuals and families; however, the majority work of the centers now is on health promotion activities. Economic development coupled with the universal medical insurance took away the needs for a separate clinic for low-income individuals, although the public health centers, especially in rural areas, still provide some level of primary medical care. The particular public health center visited is one of the best public

Table 3. Schedule of Korean Workshop		
Sept. 4, 2008 (Thu)	Sept. 5, 2008 (Fri)	Sept. 6, 2008 (Sat)
7:30-8:20 Breakfast	7:30-8:20 Breakfast	7:30-8:20 Breakfast
8:20-9:00 Opening/Orientation Welcome; Congratulatory Remarks; Opening Lecture Introduction of the group <i>Dr. S. Cho (President, KNS); Dr. M. Wahlqvist; Dr. R. Uauy (IUNS); Dr. HY. Paik</i>	8:20-9:00 Country Report (II) (Australia, Bangladesh, Indonesia, Malaysia) <i>Moderator: Drs. K Tanaka and SK Lee</i>	8:20-9:00 Country Report (III) (Pakistan, the Philippines, Singapore, Sri Lanka) <i>Moderator: Drs. M Lee and G Enkhtaivan</i>
9:00-11:30 Session I 9:00-11:00 Capacity Development for Leadership (I): Leadership development <i>Dr. SY. Gimm</i> <i>Moderator: R Uauy, SH Cho</i> 11:00-11:30 Discussion	9:00-11:30 Session IV 9:00-11:00 Capacity Development for Leadership (II): Coaching skills <i>Dr. SY. Gimm</i> <i>Moderator: J Dwyer, YS Choi</i> 11:00-11:30 Discussion	9:00-11:30 Session V Capacity Development for Leadership(III): Commu- nication Skills 9:00-9:40 Effective communication skills Communication for Nutritionists: <i>Dr. H. Shim</i> 9:40-10:20 - Nutritionist's Point of View <i>Dr. J. Dwyer</i> 10:20-11:00 - Health Scientist's point of View <i>Dr. H. Baik</i> 11:00-11:30 Discussion <i>Moderator: Drs. S Murphy and WO Song</i>
11:30-12:00 Short Presentation I	11:30-12:00 Short Presentation II	11:30-12:00 Short Presentation III
12:00-13:00 Lunch		
13:00-14:40 Session II Leadership Roles for Nutritionists 13:00-13:40 Educating/mentoring (<i>Dr. W. Song</i>) 13:40-14:20 Research/professional activities (<i>Dr. ML Wahlqvist</i>) 14:20-14:40 Discussion <i>Moderator: T Davis, YO Cho</i>	Field Trip <i>Leader: Dr. HJ Joung</i> Public Health Center, Seocho-gu, Seoul Kimchi Museum Open Market	13:00-14:40 Session VI Professional Writing for Nutritionists 13:00-13:40 Writing a grant proposal <i>Dr. T. Davis</i> 13:40-14:20 Writing for publication <i>Dr. D. Li</i> 14:20-14:40 Discussion <i>Moderator: Drs. M Wahlqvist and HJ Joung</i>
14:40-15:00 Break		14:40-15:20 Short Presentation IV
15:00-17:00 Session III Nutrition in Asia (1) : Current Status 15:00-15:15 Introduction (<i>Dr. HY Paik</i>) 15:15-16:40 Country Report (I) <i>Dr. D. Li/M.Lee, Dr. K. Krishnaswamy, Dr. K. Tanaka, Dr. S. Cho, Dr. G. Enkhtaivan, Dr. Pattanee W., Dr. N. Khan</i> 16:40-17:00 Discussion <i>Moderator:Drs. K Krishnaswamy andHY Paik</i>		15:20-15:40 Break
17:00-18:00 SNU Campus Visit <i>Leader: Drs. YH Kwon and JH Youn</i>		15:40-18:00 Session VII Nutrition in Asia (2): Capacity Development for Actions (Organized by Biofood Network Center) 15:40-16:20 Research & Policy: Partnerships and Networking: <i>Dr. S. Murphy</i> 16:20-17:00 - Partnerships with food industry <i>Dr. V. Prakash</i> 17:00- 17:40 - International Cooperation <i>Dr. R. Uauy</i> 17:40-18: 00 - International meetings: ICN 2009 <i>Dr. Pattanee W.</i> Discussion <i>Moderator: Drs. K Krishnaswamy and HY Paik</i>
Break		Break
19 :00 – Dinner/Group Activities	18:30 - Dinner	18 :30 – Dinner/Farewell Party

health centers in terms of financial situations, its forward-thinking approach to health promotion, and the extensive range of activities. Participants learned cultural and scientific aspects of Kimchi at the Kimchi Museum, where they tasted more than 20 different kinds of Kimchi. Participants also roamed around an open market where they had a chance to mingle with locals. The Field Trip provided a small segment of time for the workshop participants to breathe easy in the middle of the very tight workshop schedule, to make friends, and to see some parts of Seoul, Korea.

● **Special features**

A specialist from the Korean Leadership Center, Dr Susan Y Gimm was invited to give two 150 minutes sessions on “Capacity Development for Leadership.”

Country reports were given either by invited speakers or by participants, if there is no invited speaker from the country.

Participants, who did not give country reports, gave a short presentation about his/her works and her perspectives on leadership in nutrition.

A field trip was arranged to visit a district public health center, Kimchi museum, traditional open-market ending with a traditional Korean dinner.

All participants, including those from Korea, were required to stay on site throughout the program. Each participant had a roommate from a different country as well as group members from different countries.

A mentor was assigned to each group of two or three members throughout the workshop. A host, a Korean scientist from the local organizing committee, was also assigned in order to assist the participants with any difficulties arising from unfamiliarity to the local conditions.

● **The commitment of mentors**

Mentors remained in close contacts with the mentees throughout the workshop. The participants enjoyed being in a group with prominent mentor(s) and expressed their appreciation about the mentor-mentee relationship.

● **The feedback from participants**

A survey was conducted at the end of the workshop. The mean score of overall evaluation of the workshop was 4.7 out of 5. For individual programs, ‘coaching skills’ and ‘leadership development’, the two sessions of the “Capacity Development for Leadership” received the highest scores.

Participants wished more time to be devoted in areas of field experiences, training on leadership skills, discussions, and group activities.

Participants rated very highly about speakers and appreciated the chance to hear from prominent scholars in the field. They were also very satisfied with the composition of participants, while some participants wished to have participants from more number of countries.

Participants were generally satisfied with the venue of the workshop. There were some problems with meal

services especially for those on vegetarian diet and breakfast. Vegetarian menus are generally not much served in Korea. Since the venue was a small university facility, they were not used to serving a large number of customers for breakfast in a short time.

● **Follow-up**

After the workshop, thank you letters were sent to all the participants and invited speakers. Some participants sent a thank you letter to KNS even before we sent out our letter. All the presentation files and information were uploaded to the workshop website. A workshop report was also prepared and sent to all the participants and invited speakers. Participants expressed a strong wish to keep the network among the participants and mentors, but no specific efforts have been made due to limitations of resources.

TAIWAN

Taiwan Nutrition Leadership Training Program: An joint project initiated by the International Union of Nutritional Sciences (IUNS) and sponsored by National Health Research Institutes (NHRI) of Taiwan and Taiwan Nutrition Society organised by Drs Ching-jang Huang, France Ma, Meei-Shyuan Lee and Mark L Wahlqvist.

The workshop was held on October 2nd-4th 2008, at NHRI (National Health Research Institutes of Taiwan) and the nearby Lakeshore Hotel, Hsinchu, Taiwan. The Program’s aim was to develop and advance the vision, the skill and the nature of leadership in outstanding young nutrition professionals through extensive interaction with mentors. The 21 trainees were invited based on an evaluation of their potential as a leader. Among them, 13 were dietitians engaged in the area of clinical, public health or industry. The remaining 8 were assistant, associate or full professors teaching and doing research in nutrition in various Universities. They were all aged no more than 40.

A total of 13 mentors participated by way of direct mentoring of a small group of trainees, talks and/or leading discussions in various sessions. Most of them were from academia and specialized in nutrition which was basic science, epidemiological, public health or policy research. Some had also been significantly involved in administration and clinical practice. Dr. Widjaja Lukito from SEAMEO-TROPED, Indonesia was a special guest mentor with a wealth of experience in each of these areas.

The workshop started with the self-introduction of each trainee and their mentors. A total of four sessions were held with a half day each. These were: 1) Leadership in Food, Nutrition and Health Policy; 2) NHRI opening with two keynote addresses; 3) Nutrition Research Leadership; 4) Clinical Nutrition Leadership. Several initiative talks were given by mentors in each session and followed by a panel discussion (Table 4). Issues for group discussion were then derived from the panel discussion. Trainees and mentors were assigned to 4 groups. Each group chose an issue and engaged in group discussion. Each session ended with a report from each group based on the group discussion. Mentors then gave their comments on the reports. As an example, in the panel discussion in Session one (Leadership in Food, Nutrition and

Table 4. Schedule of Korean Workshop



臺灣營養領導人才培訓研習營

Taiwan Nutrition Leadership Training Program

An Initiative of the International Union of Nutritional Sciences & the Taiwan Nutrition Society

Host: NHRI

Date/Time: October 2nd - 4th 2008

Venue: National Health Research Institutes/Lakeshore Hotel HsinChu

Time	Venue	Thursday, 2 nd October 2008
18:00-19:00	Lakeshore Hotel	Registration
19:00	Leith Castle	Light dinner
20:00-22:00	B1 Versailles III	Trainees introduce themselves
Friday, 3rd October 2008		
8:30-9:00	Lakeshore Hotel	Overview: The Nature of Leadership
9:00-10:00	Leith Castle B1 Versailles III	Session 1: Leadership in Food, Nutrition and Health Policy Topics proposed: 1. Interdisciplinary and Integrative Nutrition (Mark Wahlqvist) 2. The New Food Crisis (Mark Wahlqvist) 3. International Nutrition (Ray-Yu Yang) 4. Nutrition Policy in Taiwan (Min-Su Tzeng) Moderator: Nain-Feng Chu Organizers: Ray-Yu Yang and Mark Wahlqvist
10:00-10:30		Panel Discussion with trainees (Identify key leadership issues arising from this session)
10:30-11:00		Tea break
11:00-12:30		Team Discussions of the issues from Session 1 (eg. 4 teams x 5-6 people = 20-24 trainees plus 2 mentors for each team; appoint rapporteur and moderators)
12:30-15:00	HsinChu	Lunch and outside discussion
15:00-15:30	NHRI B1 Conference Room# 1	Session 2: NHRI Opening Biomedical and Health Research in Taiwan President Kenneth Wu, NHRI Leadership in Government Representative of Department of Health Moderator: Ching-jang Huang
15:30-16:30		Keynote address: Nutritional Crisis and Policy Dr. Widjaja Lukito, SEAMEO-TROPMED, Indonesia
16:30-17:00		Tea break
17:00-18:30		Team Discussions about Session 2 (Organizational leadership)
19:00-20:30	Hotel	Dinner at hotel
20:30-21:00		After dinner chats amongst mentors and trainee leaders
Saturday, 4th October 2008		
9:00-10:00	NHRI B1 Conference Room# 1	Session 3: Nutrition Research Leadership Topics proposed: 1. Leadership in Nutrition Research (Ching-jang Huang) 2. Preventive Nutrition (Meei-Shyuan Lee) 3. Health and Nutritionally-Related Disorders and Diseases (Wen-Harn Pan) 4. Education and Food-Health Literacy (Tzu-I Tsai) Moderator: Mark Wahlqvist Organizers: Wen-Harn Pan and Ching-jang Huang
10:00-10:30		Panel Discussion with trainees to identify key leadership issues
10:30-11:00		Tea break
11:00-12:30		Team Discussions of Key Issues from Session 3
12:30-13:30		Lunch
13:30-14:30		Session 4: Clinical Nutrition Leadership Topics proposed: 1. From Basic Science to Clinical Nutrition and Management (Meng-Chuan Huang) 2. Ethics in Nutrition (Guoo-Shyng Wang Hsu) 3. Nutrition Education and Leadership (Frances Ma) Moderator: Meei-Shyuan Lee Organizers: Frances Ma and Meng-Chuan Huang
14:30-15:00		Panel Discussion with Trainees about Session 4
15:00-15:30		Tea break
15:30-16:30		Team summary reports of whole program with recommendations (5-6 in one team/4 groups/10 min each plus 5 mins discussion)
16:30-17:00		Presentation of IUNS-TNS Certificates Conclusions and future directions (Ray-Yu Yang/ Ching-jang Huang)

Health Policy), four focus issues were decided for the group discussion: Linking Nutrition and Agriculture, Food Safety in Taiwan, International Nutrition in Taiwan, and Future Perspectives about the Training and Education of Nutrition Professionals for a future workforce. Each group chose one of these topics. After the discussion, each group reported their views on how to deal with the issue through nutrition leadership. For the "Food Safety" issue, the group considered SOP (Standard Operating Procedure for the Investigation of Food Poisoning Outbreaks)¹⁵ for a response to a food-borne illness outbreak or other emergency outbreak as absolutely necessary. In addition, the process and conclusion of the risk assessment should be well communicated to the public. For the "International Nutrition" issue, the group suggested export of the successful Taiwan experience in combating malnutrition; it may also be possible to take advantage of those International associations (as in the Buddhist community) which are committed to contribute through charity. For "linking Nutrition and Agriculture", the group recognized that the nutritionist can play a critical role in planning agricultural production and in linking agricultural producers and consumers. For the "Development of the Nutrition Professional Workforce", the group considered that professional competence is extremely important and that Universities should re-evaluate their education and training program. Furthermore, the nutrition community in Taiwan should strive to create more positions for nutrition professionals in the public domain such as in administration so that nutrition expertise is readily available in policy-setting and project-planning.

Discussions in other sessions were as fruitful as in Session one. Trainees were exposed to a great variety of nutrition-related issues which had rarely been encountered before. The emergency nutrition situations in Indonesia in recent years, reported by Dr Lukito; the ethical issues raised by Dr Wang; and the food-health literacy opportunities presented by Dr Tsai were such examples. Mentors provided their own experience in the development of their careers and how they have learned to manage their roles more efficiently and effectively. These experiences greatly encouraged the trainees and strengthened their self-confidence in whatever their future may bring.

Each group was asked to discuss and present their ideas about Nutrition Leadership characteristics. The responses included: Responsibility, Integrity, Courage, Vision, Kindness, Sharing, Capability in Coordination and Execution, Life-long Learning, Creativity, Inspiring, Wisdom, Charisma, Team player, Innovation and being Open-minded.

While several IUNS Nutrition Leadership Training Programs have been held in various parts of the world, it was still a challenge for the organizers to figure out what might be an appropriate approach for Taiwan, considering its unusual status. With the valuable guidance of all mentors and the efforts and committed participation of all trainees, this workshop was highly successful by the final accounts given from each group. In the 2 day and 2 night event, there was an atmosphere which revealed the wide-range and broad spectrum of nutrition. The critical role nutrition professional can play and the impact and contri-

bution he/she can make, both nationally and internationally, was evident to the potential future leaders. For most of the participants, it exceeded their past experiences and provided new insights. One group of trainees decided to share their experience by helping to organize similar workshops and, hopefully, to inspire more future nutrition leaders. The full program has been video recorded and posted on the website¹⁶: <http://ehealthpolicy.nhri.org.tw/lecture.htm>, which can be viewed freely.

CONCLUSIONS

The hallmarks of these nutrition leadership training programs were, firstly, that they were convened jointly by a host Nutrition Society, along with IUNS, and that there was clear commitment from the relevant health sciences, sector or system; there was, nevertheless, relatively little input from the food system (food production, transport, technology, processing, packaging, retailing, marketing, commerce), non-government organizations (NGOs), or

Table 5. Challenges for a new generation of nutrition leaders

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- ❖ A nutrition leadership shortage
 - ❖ The need for succession with trust, as a mutual responsibility of younger and more senior leaders
 - ❖ Acknowledgement that the nature and needs for leadership change with time, place and culture
 - ❖ A fragmentation of science and practice with ultra-specialisation which reduces possibilities for cohesive solutions to personal, community and global threats
 - ❖ Technological advances and competencies which tend to be generational, e.g., agriculture, transport, IT
 - ❖ Community leaders could facilitate connections between localities for strategies with importance for health, food safety, sustainability and security in diverse localities
 - ❖ Culturally and globally sensitive styles of leadership which can respond to changing conditions
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finance. Secondly, the young potential leaders were given front-line roles and expected to be active contributors. Thirdly, there was a low ratio of mentor to trainee leader (usually 1:2 or 3). Fourthly, there was "time out" for mentors to be with trainees in attractive, restful and natural settings, conducive to creativity and conversation. Fifthly, there were inter-generational role models with similar cultural backgrounds who had experiences to share, like Dr Pao-Hwa Lin, nutritionist for the DASH study for the dietary prevention of hypertension.¹⁷ Sixthly, there was an identification of pressing needs for nutrition and health policy and leadership to reflect sustainability and affordability. Finally, responsibility for conclusions and future directions was accorded to the trainees.

It was generally agreed that there were specific challenges for collective and local action by a new generation of nutrition leaders (Table 5).

The over-arching decisions of the workshops were to build networks on the internet amongst the coming generation of leaders for mutual support, problem definition and solution. These networks could have commonalities based in science and technology, language and culture, geographical region, professional affinities, or shared problems, alert systems or the promulgation of discovery

and innovation. It would be valuable to have some measure of the impact of such a network strategy.

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AUTHOR DISCLOSURES

All authors declared that there is no conflict of interest.

REFERENCES

1. Johnson-Welch C, MacQuarrie K, Bunch S. A Leadership Strategy for Reducing Hunger and Malnutrition in Africa: The Agriculture-Nutrition Advantage: International Center for Research on Women (ICRW); 2005.
2. Wahlqvist ML, Lee MS. Nutrition in health care practice. *J Med Sci*. 2006;26:157-64.
3. Wasantwisut E. Capacity Development in Nutrition: Institutional Commitment. Paper presented at: Building Leadership Skills in Food and Nutrition Essential for National Development, 2006; Mysore.
4. Wahlqvist ML. The new nutrition science: sustainability and development. *Public Health Nutr*. 2005;8(6A):766-72.
5. Wahlqvist ML. New nutrition science in practice. *Asia Pac J Clin Nutr*. 2008;17(S1):5-11.
6. Cannon G, Leitzmann C. The new nutrition science project. *Public Health Nutr*. 2005;8(6A):673-94.
7. Nye JS. *The Powers to Lead*. New York: Oxford University Press, Inc; 2008.
8. Millennium Development Goals. United Nations. Available at: <http://www.un.org/millenniumgoals/>, 2008.
9. Wahlqvist ML, Specht RL. Food variety and biodiversity: eiconutrition. *Asia Pac J Clin Nutr*. 1998;7(3/4):314-9.
10. Wahlqvist ML, Lee MS, Lau J, Kuo KN, Huang Cj, Pan WH, Chang HY, Chen R, Huang YC. Evidence-based nutrition (EBN) in the Asia Pacific region: clinical practice and policy-setting. *Asia Pac J Clin Nutr*. 2008;17:2-7.
11. Wahlqvist ML, Lee MS. Regional food culture and development. *Asia Pac J Clin Nutr* 2007;16(Suppl 1):2-7.
12. McMichael AJ. *Planetary Overload: Global Environmental Change and the Health of the Human Species*. Cambridge: Cambridge University Press; 1993.
13. World Cancer Research Fund/ American Institute for Cancer Research. *Food, Nutrition, Physical Activity, and the Prevention of Cancer: a Global Perspective*. Washington DC: AICR; 2007.
14. Leadership Training. Asia Pacific Clinical Nutrition Society. Available at: <http://www.apcns.org.cn/Study-Leader.html>.
15. Standard Operating Procedure for the Investigation of Food Poisoning Outbreaks. Australia: Department of Health; 2003.
16. Taiwan Nutrition Leadership Training Program. National Health Research Institutes. Available at: <http://ehealthpolicy.nhri.org.tw/lecture.htm>.
17. Moore T, Svetkey L, Lin PH, Karanja N, Jenkins M. *The DASH diet for hypertension*. New York: Free Press; 2001.

